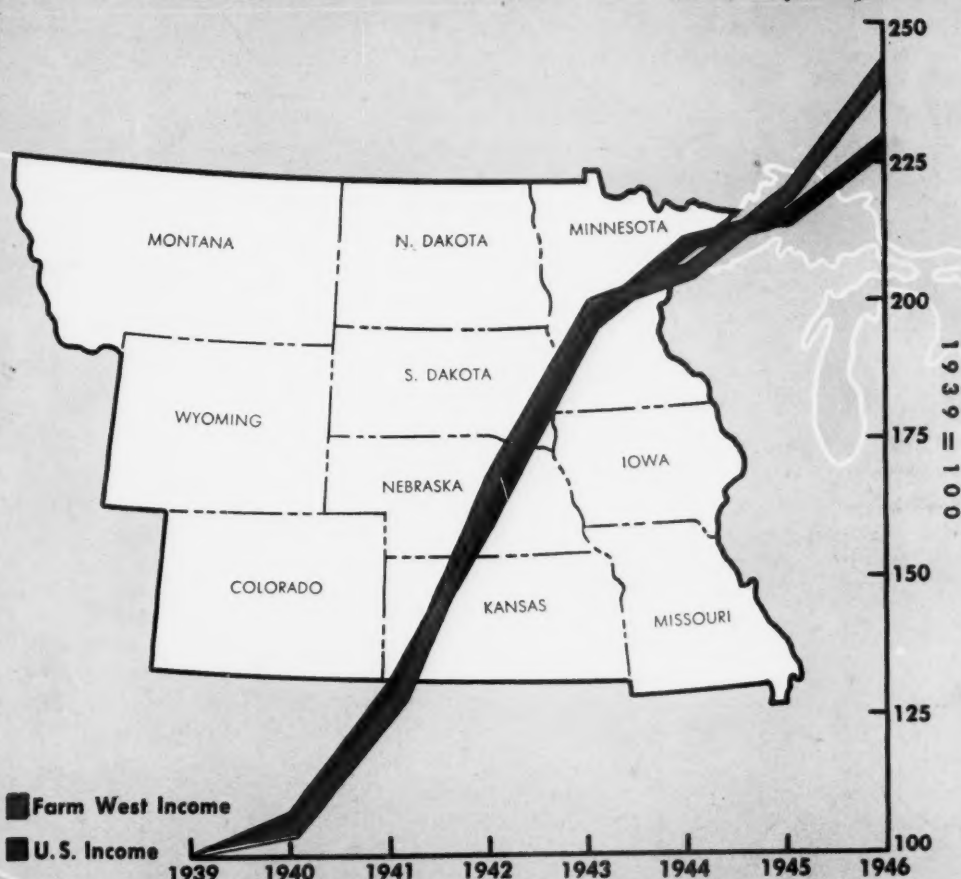


BUSINESS WEEK

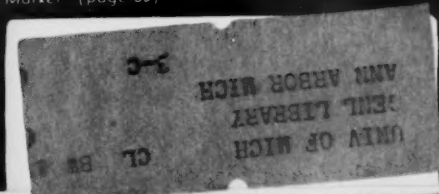
SEPT. 27, 1947

THE FARM WEST MARKET



No. 6 in a series of Reports to Executives on "The New American Market" (page 65)

A MCGRAW-HILL PUBLICATION





"Technological unemployment"... or progress?

YES, it took more men to dig a ditch by hand than with a Gradall today.

Does that mean fewer jobs today because of this modern so-called "labor-saving" machine? No—it means *more* jobs. The cheaper a road can be built, the more roads; the more roads, the more jobs for roadbuilders. This is the real miracle of the machine age, and it applies everywhere, as figures prove:

The more efficient the machine and the more efficiently it is used, the lower the cost of the product or service it produces. The lower the cost, the more people who can use that product or service. The more people who use it, the

more jobs needed to provide it—and higher the pay of those jobs.

Therefore the people who try to "make work" are only raising costs which raise prices or reduce demand or both. Instead of *making* work, they are *destroying* it.

Even in periods of depression there are more people employed in these mechanized times than were employed during booms in the old handwork days, and at higher wages today, with less physical effort.

The modern machine provided by management, efficiently used by workers, is the best team ever devised to provide *more* jobs and *better* jobs.



**WARNER
&
SWASEY**
Machine Tools
Cleveland

YOU CAN MACHINE IT BETTER, FASTER, FOR LESS WITH WARNER & SWASEY TURRET LATHES, MULTIPLE SPINDLE AUTOMATICS AND TAPPING MACHINES



Icebags that cure a business headache

Koroseal is a typical B. F. Goodrich development

MILLIONS of pounds of ice cubes are sold every year to restaurants and bars. Delivery has always been a problem.

The minute bags are filled at the plant, the ice starts to melt. The moisture soon rots the fabric—replacement bags were a bigger factor than you might suspect. And dripping bags were no hit with the customer.

The bag maker had heard of *Koroseal* coatings, developed by B. F. Goodrich. Because it does not absorb water, *Koroseal* coated fabric does not rot, and of

course doesn't let water drip through.

B. F. Goodrich engineers developed a bag of fabric with a *Koroseal* coating, and for good measure mixed in aluminum powder—the aluminum reflects heat and so keeps the ice cold longer.

This bag was tried—and lasted many times as long. It keeps the ice cold and so gives customers full value. And it doesn't drip. It's also easy to keep clean and sanitary. Everybody is pleased, everybody benefits—a typical result when *Koroseal* films and coat-

ings are used in place of less modern materials. *Koroseal* films and coatings are not only waterproof, they resist acids, oil, grease, sunlight, air, and wear as well.

They are making scores of products better in many ways, more saleable, more economical, longer lasting. We will be glad to discuss their application to *your* product or process. The B. F. Goodrich Company, Akron, Ohio.

Koroseal—Trade Mark Reg. U. S. Pat. Off.

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Koroseal Coatings, Films, Forms

How Modern Managers Make Air Quality An Asset

Indoor air, whether just stuffy or downright unpleasant, so often hurts good will. Why run that risk when a simple application of Airkem Chlorophyll Air Freshener keeps air freshened and odor free? It's no wonder more and more businesses and institutions like these rely on Airkem.



Restaurants

Hundreds of restaurants all over the country rely on Airkem Service to overcome odors of tobacco smoke, food, crowds and liquor. They depend on it to keep the air freshened for the enjoyment of their patrons.

In Los Angeles, the 4 nationally-famous Brown Derby Restaurants serve fine foods to a discriminating clientele. To assure an "air of quality" they use Airkem Service.



Factories

Factories everywhere depend on Airkem to counteract odors like those of cutting oils, industrial solvents, etc. They use it to freshen air in locker rooms, cafeterias, offices and dispensaries. Many report greater employee efficiency.

In its completely modern plant at Belleville, N. J., Eastern Tool & Mfg. Co. uses Airkem Service to improve public relations . . . and employee relations, too!



Hospitals

For the comfort of both patients and staff, hospitals use Airkem to counteract the odor of cancer, osteomyelitis, colostomy, and many others. They use it to freshen air in wards and private rooms—for spraying and mopping.

Columbia-Presbyterian Medical Center is one of the world's largest, most complete institutions of its kind. They use Airkem Service in many different ways.



Protects

Airkem Service protects you in two positive ways at the nose level. It freshens stale indoor air while it counteracts odors.

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H. C. Sturm

BUSINESS WEEK • SEPTEMBER 27 • NUMBER 1000 (with which are combined The Annalist and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman • Publication Office 99-129 North Broadway, Albany 1, N. Y. Return postage guaranteed. Second-class postage paid at New York, N. Y., and at additional mailing offices. Postmaster: Send address changes to J. H. McGraw, Jr., President; Curtis W. McGraw, Senior Vice-President and Treasurer; Nelson Bond, Director of Advertising; Eugene Dunfield, Editorial Assistant; President; Joseph A. Gerardi, Secretary • Address correspondence regarding subscriptions to J. E. Blackburn, Director of Circulation, Business Week, 99-129 North Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 36, N. Y. Allow ten days for change of address. Single copies 10¢. Subscription rates—United States and possessions \$5.00 a year • Canada \$6.00 a year. Pan American countries \$7.00 a year • All other countries \$8.00 a year • Entered as second-class matter Dec. 4, 1936, at the Post Office at New York, N. Y., under Act of Mar. 3, 1879 • Printed in U.S.A. Copyright 1947 by McGraw-Hill Publishing Co., Inc. All Rights Reserved.

WASHINGTON OUTLOOK



A HATFUL OF DOMESTIC PROBLEMS

has Washington running around in circles. They all depend on a foreign problem—what to do about Western Europe.

Until Congress decides that one, there won't be any answers on prices, on food, on controls, even farm policy or taxes.

Today's muddle and hysteria over the domestic issues result from the abrupt realization of what the Marshall plan will cost—in dollars, in shortages, in ever-rising prices, in Washington telling you what to do.

The Harriman report was set up as a propaganda move to prove that foreign aid is easy. But it's obsolete before it comes out.

The report is now due late in October. It will be essentially: The Marshall plan calls for no more than we've been doing since January.

But the effects of what we've been doing since January are evident in every grocery store.

The report on European needs, as it came through from Paris this week (page 105), got far less than 100% approval in Washington. The help planning for Europe doesn't seem impressive enough to satisfy a skeptical Congress.

SO WHAT'S NEXT?

The dominant reaction here is: If war-weary Europeans can't organize Europe, Americans will have to.

That's the thinking behind proposals we've been telling you about for a European WPB (W—Sep. 6 '47, p5), or perhaps a super trading corporation.

Some of the original Marshall plan advocates are now defeatist. They don't believe American planning for Europe will work or will be tolerable to Europeans. They have been shaken by Walter Lippmann's articles.

They are groping for a substitute for the whole philosophy of fencing Russia in.

There is a policy-making group that believes in American planning for Europe—men like Lovett

in State, Krug in Interior, and some congressmen around the Herter committee.

They are mulling over the sort of controls that will be necessary to stretch our economy to cover Europe's.

DIRECT PRICE CONTROLS are not in the picture. Just the same, some Administration people are disturbed by the thought that Truman might ask Congress for price control, just for the record—and that the Republicans might toss it to him. Thus Truman would be stuck with another unpopular OPA.

PRODUCTION AND USE CONTROLS are in the picture:

(1) Priority for export orders—already on the books;

(2) Limits on grain use by distillers and other industrial users—which would need congressional action;

(3) Restrictions on eating—but only on a voluntary basis;

(4) Limitations on the use of tin and antimony—to be continued;

(5) Limitations restored on lead and cadmium—if Congress goes along.

(6) There's talk of stepping up output of sheet, strip, and other finished steel by scheduling orders into the mills as was done during the war.

That won't be all.

EMERGENCY FOOD AND FUEL NEEDS of Europe this fall add to the confusion.

State Dept. wants an October special session of Congress to provide quick money, then get started on Marshall plan discussion.

Politicians instead urge use of money from Commodity Credit Corp., World Bank, International Monetary Fund—anywhere but Congress.

The White House itself is now convinced of the need for a special session. Still undecided: whether it should be a quick one or a late-in-the-year call that would simply start Marshall plan debate ahead of the January session.

Truman is now negotiating with congressional leaders. He's trying, rather fruitlessly, to get an agreement to keep domestic issues out of any

WASHINGTON OUTLOOK (Continued)

special session of Congress he may call. He is to canvass the whole situation with them at a White House conference.

TAFT'S CANDIDACY is getting a bit of peping up from the C.I.O. and Communist demonstrations against him on his western trip.

Taft's Seattle speech this week provided the first lively crowd he's encountered yet. Most of the vigor was provided by an admittedly Communist claque in the hall. First it booed, then staged a walkout.

New Deal Sen. Murray has been warning C.I.O. it can elect Taft if it isn't careful.

- NLRB's extension to Oct. 31 of deadline for filing non-Communist affidavits under Taft-Hartley may avert need for a board ruling on whether top officers must file; both C.I.O. and A.F.L. will vote on the question at next month's conventions. . . .

- Truman has started canvassing all federal agencies for recommendations on next year's legislative program. This is first time in years the whole Administration has been consulted before hand. . . .

- Never underestimate the power of a sailor. War Dept. telephone operators this week were already answering "National Defense"; the Navy switchboard was still holding out for "Navy Dept."

CALIFORNIA DIVIDED

California Democrats are split three ways.

And, as things stand now, the split may go right down to next June's balloting for delegates to the national convention.

Here are the feuding leaders:

Ed Pauley—National committeeman, and the man who put California on the Truman bandwagon at Chicago in '44. He expects to control the state's '48 delegation for Truman.

Jimmy Roosevelt—State chairman. He's also for Truman. But he threatens to put a "favorite son" delegation in the field rather than let his group sign on as a minority segment in the Pauley camp.

Bob Kenny—Former state attorney general and leader of the anti-Truman left-wing. He says he positively will enter a Wallace slate of delegates.

There's hardly anyone among California Democrats who gives Kenny a chance—except Kenny. Sen. Pepper pulled the plug on the Wallace movement when he announced for Truman several weeks ago.

Kenny himself concedes he has only the "independent liberals" traveling with him; everyone else labels his supporters as extreme left-wingers.

His philosophy: It's better to lose with a "good" man than a "bad" one. He doesn't give Truman a chance to win next year. With a Wallace ticket, Kenny sees the Democrats able to lure the "independents" to the polls, win a block of seats in Congress on which to build for the next campaign.

The real scrap lies between Pauley and Jimmy Roosevelt. On its outcome could hinge Truman's chances of carrying the state next year.

The split between these two is the split in ideology within the party itself. Pauley speaks for the conservative, right-wing, moneyed Democrats; Roosevelt carries the old F.D.R. banner of the left-of-center forces.

Jimmy's people want to oust Pauley and force from control of the state party.

But, more than that, they want a hand in picking Truman's running-mate—someone of their own stripe. They want to write their own kind of party platform for '48.

A Pauley delegation would rubber-stamp whatever the boss wants.

It's Truman's choice. And Truman has probably obviously plumped for Pauley.

That's what Roosevelt is finding out on his trip East. So now Jimmy and his friends are weighing two courses:

- (1) They can enter their own slate of convention delegates, nominally pledged to Jimmy himself or to someone like Rep. Helen Douglas—openly intending to switch support to Truman at the top billing.

- (2) Roosevelt might pull out of the presidential side of California politics. Then he would opt for exerting national influence by a personal campaign of speeches, backed up by his mother and his brother, Franklin, Jr.

And there's always the chance that a Pauley campaign for delegates might encounter enough apathy so that Truman would turn to Jimmy before the convention.

What is it now?



NOW it's a living room! And your Pullman room has all the comforts and conveniences you have in your living-room at home—including some you may not have, like air-conditioning.



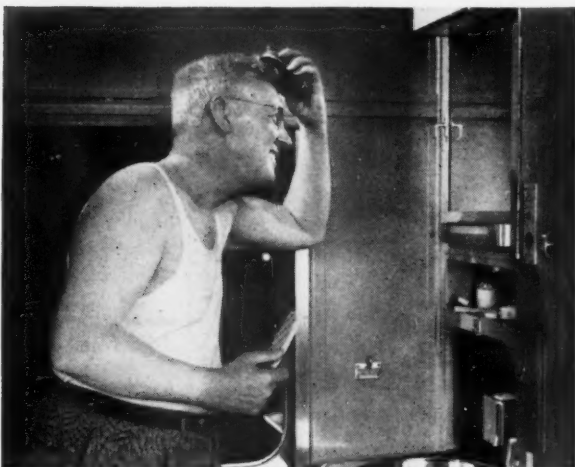
NOW it's an office! You buzzed for the porter and he brought a table, turning your Pullman room into an efficient "office" where you plan tomorrow's work in privacy and comfort.

IMPROVED SECTION ACCOMMODATIONS, TOO!

Many of the new cars now going into Pullman service include improved upper and lower berth accommodations, as well as private rooms. Whether you occupy a room or berth, that famous Pullman service is always yours to command; Pullman lounge car hospitality yours to enjoy.



3 NOW it's a bedroom! And what a swell night's sleep you get in that big, soft Pullman bed—while you speed safely through the night, to arrive on dependable railroad schedules.



4 NOW it's a dressing-room! You have your own wash-bowl and toilet in your Pullman room. On your next trip, enjoy a Pullman four-rooms-for-the-price-of-one!

Go Pullman

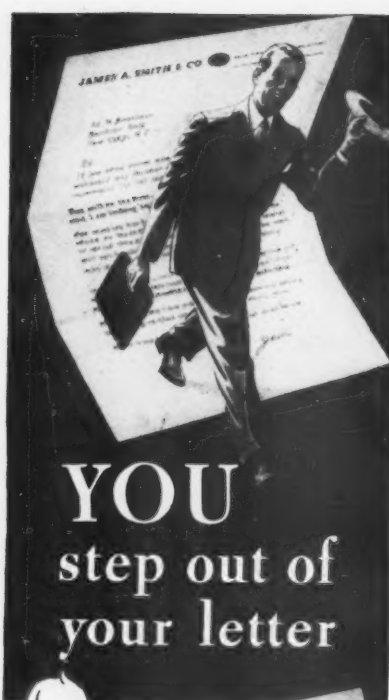
THE SAFEST, MOST COMFORTABLE WAY
OF GOING PLACES FAST!



DAY
←
NIGHT
→



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THE COVER

The Farm West Market

There is enough commotion about high food prices today to suspect—even to know—without investigating that the average farmer is well off.

Nowhere is farm prosperity more evident than in the 10-state area which lies between the Mississippi and the Rockies—a region which claims a high percentage of above-average farmers.

• **High Prices—High Production**—This is the Farm West, where power farming came into its own. In this region, the high prices of farm products are only equaled by the high rates of production. With that combination, the Farm West has become a rich, attractive region for America's marketers.

From 1939 through 1946, new wealth was stacked up in the corn and wheat belts. And this new wealth was divided among a smaller number of people. For the farm revolution—mechanization of agriculture—brought along with it a steady exchange of machines for men.

• **Farm-to-City**—Ownership of farm land became concentrated in the hands of a smaller number of proprietors. Farm hands became fewer and better paid. So, individual incomes shot up rapidly.

But successful farming is not the whole story. There has also been a big shift from farms to cities, and from distribution to manufacturing within the cities.

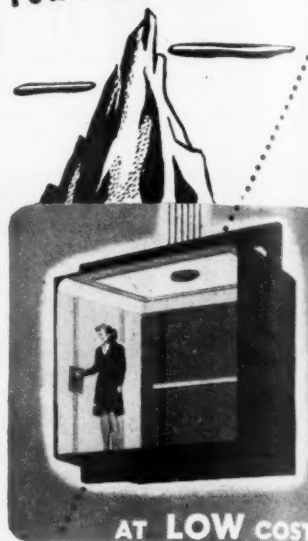
If you are a native of the Farm West territory, you're bound to be conscious of the shift. If you're a marketing man, the farm-to-city change takes second place in interest to the boom in agriculture itself.

• **Golden Dollars**—How the over-all rise in agriculture came about and what it means to the whole regional economy is described in the sixth of a series of regional reports (Report to Executives: "The New American Market," page 65).

There are other significant changes in population, labor force, sales, income, and savings. Taken all together, they prove that America's farmers are finding golden dollars in the fields of golden grain. These same factors furnish reliable clues as to the future prospects—short and long term—of this segment of the New American Market.

The Pictures—Oscar—15, 16, 17; Acme—46, 52, 105, 106; U. S. Dept. of Agriculture—19; McGraw-Hill Studios—22; Sovfoto—31; Press Assn.—34, 98; Fairchild Aerial Surveys—41; Int. News—45, 94; Kirkland-Pix—65; Guth—106.

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BUSINESS WEEK • Sept. 27, 1947

BUSINESS OUTLOOK

BUSINESS WEEK

SEPTEMBER 27, 1947



Business will not be influenced immediately by the Marshall plan aid outlined this week. Nor is it putting market prices up—yet.

But that doesn't mean the Marshall plan is not affecting business sentiment.

Business receded but little from its March peak to the July low. It picked up in August, and September figures will show some slight further improvement.

These gains were registered despite declining export trade and slackened inventory accumulation. If this domestic bounce persists until Marshall plan funds are voted, the recession may be averted.

The main danger lies in prices. But, with big government buying in prospect, markets tend to lose little ground while awaiting results.

Price declines that have taken place the last few days aren't such as to have much effect on the cost of living.

Mainly, there has been a penny or two off prices here and there—meats, eggs, butter. But the food price index isn't down much.

Meanwhile the cost of industrial raw materials still is rising—not much, but enough to give some threat of higher prices on finished goods.

A rail freight-rate increase would add just one more pressure.

Feuding over speculation in commodity futures will be intensified by Sen. Ralph Flanders' determination to ask President Truman to act.

So far, increases in margin requirements on grains, butter, eggs, and hides have brought only minor reactions. Some observers even argue that prices were already topheavy, that they fell of their own weight rather than because of the new margins.

The opposite view, of course, is that really stringent margin requirements would have a much more positive effect.

Prices on the stock market give only the impression that investors feel business prospects are obscure.

Tuesday afternoon witnessed one of those short, sudden spills that have come to be so characteristic of stock trading recently. It probably was touched off by Arab threats to rescind oil concessions if Palestine were partitioned. But there's more to these bursts of selling than that.

For a whole year now, stocks have been beset by fears of what was going to happen at home or abroad. The Marshall plan doesn't seem to have resolved these fears—though it could assure four years of prosperity.

Sidelight on the aid-for-Europe and grain-shortage problems:

The baking and milling industries probably will have to give up big 1948 advertising campaigns to spur use of flour and baked goods.

They aren't sure yet what theme they can use instead—nor is anyone very confident that the budgets will be as large as had been planned.

Most encouraging business indicator at the moment is an uptrend in manufacturing employment.

This shift started in late July and early August. Total nonagricultural employment rose 400,000 in that period; manufacturing provided just about three-quarters of those new jobs.

Thus a downtrend that started last March has been interrupted. Man-

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
SEPTEMBER 27, 1947

ufacturing employment in August is estimated at 15,484,000. That's more than 300,000 above July and the best since March's 15,512,000.

More jobs in manufacturing are important at this time of year. They help take up the slack caused by the seasonal decline in agricultural employment. Result: unemployment still only a little above two million.

Higher nonagricultural employment in August must have added to spending money, but it had no comparable effect on retail sales.

Independent stores report only a fractional change from July to August in the aggregate. To be sure some lines were better: apparel, up 8%; jewelry, up 6%; general stores, up 5%. But food stores' dollar volume was unchanged and both automotive and hardware sales were down.

It is perhaps significant, too, that August this year was only 1% ahead of last in retail volume. Thus merchants took in a shade more for substantially less merchandise when allowance is made for price rises.

New homes are selling at a steadily accelerating rate. And, as might be expected, sales of old properties decline correspondingly.

The number of mortgages recorded was little changed from June to July, Home Loan Bank Board figures indicate. However, value bounced more than 5% as a result of larger average size per loan. These figures cover only nonfarm mortgages of \$20,000 or less.

Since the end of the war, average loan-per-home is up a third.

Some in the chemical industry express real concern over current price advances in widely used industrial items (BW—Sep.20'47,p18).

However, there is as yet little evidence of price resistance. In fact, latest Dept. of Commerce figures indicate that production of many chemicals still can't catch up with demand.

Alkalies are more or less typical. Production was high throughout the first half of this year, but demand continued to exceed supply even though some signs of improvement were reported.

Raw materials problems in the paint field, says Commerce, were becoming less severe at midyear. This applied to both oils and pigments.

Big paint companies still say costs won't justify them in following lower prices posted by some of the smaller concerns (BW—Jul.5'47,p10).

Latest available figures on industry-wide sales are for June. That month there was a drop of \$6,842,000 from the May peak of \$99,586,000.

Industry leaders dismiss that decline as past history (and, besides, it was the biggest June ever). Both industrial demand and retail sales are reported continuing at very high levels.

Only this week, Dwight P. Joyce, president of Glidden Co., declared against lower prices now, citing advancing quotations on oils. His company is cutting into order backlogs but they still are big.

Reports that the Russians are buying platinum in this country contain only one error. They're selling, not buying.

At least, that is indicated by second-quarter import figures. Russia supplanted Canada as the leading supplier to everyone's surprise.

The U.S.S.R. shipped us 23,460 oz. of refined platinum against 14,900 from Canada and 11,867 from all other sources.

FIGURES OF THE WEEK

	% Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
THE INDEX (see chart below).	*183.1	†181.4	183.7	181.9	162.2

PRODUCTION

Steel ingot operations (% of capacity).....	94.1	89.4	93.4	90.4	97.3
Production of automobiles and trucks.....	110,088	†106,095	84,726	80,972	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$21,513	\$21,590	\$17,229	\$16,568	\$19,433
Electric power output (million kilowatt-hours).....	4,977	5,053	4,953	4,507	3,130
Crude oil (daily average, 1,000 bbl.).....	5,200	5,217	5,153	4,775	3,842
Bituminous coal (daily average, 1,000 tons).....	2,100	†2,148	1,958	2,148	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	88	88	85	86	86
All other carloadings (daily average, 1,000 cars).....	66	†66	66	66	52
Money in circulation (Wednesday series, millions).....	\$28,633	\$28,742	\$28,239	\$28,453	\$9,613
Department store sales (change from same week of preceding year).....	-1%	†+1%	-6%	+37%	+17%
Business failures (Dun & Bradstreet, number).....	73	75	59	19	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	429.0	435.0	419.7	335.2	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	272.0	270.7	266.2	205.6	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	380.4	391.3	375.2	292.2	146.6
Finished steel composite (Steel, ton).....	\$75.41	\$75.41	\$75.41	\$64.45	\$56.73
Scrap steel composite (Iron Age, ton).....	\$37.75	\$37.75	\$37.83	\$19.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	21.500¢	21.500¢	21.500¢	14.375¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.72	\$2.69	\$2.34	\$1.96	\$0.99
Sugar (raw, delivered New York, lb.).....	6.32¢	6.32¢	6.32¢	5.57¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	31.44¢	32.07¢	33.49¢	37.15¢	13.94¢
Wool tops (New York, lb.).....	\$1.745	\$1.745	\$1.725	\$1.330	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	16.60¢	16.47¢	15.45¢	22.50¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	119.8	119.6	121.7	116.2	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.26%	3.23%	3.18%	3.15%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.63%	2.61%	2.56%	2.60%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	14-14½	14-14½	14-14½	14-14½	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1%	1%	1%	3-8%	4-8%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	47,498	47,350	46,780	46,242	††27,777
Total loans and investments, reporting member banks.....	64,714	64,292	63,646	67,786	††32,309
Commercial and agricultural loans, reporting member banks.....	12,853	12,719	12,301	9,912	††6,963
Securities loans, reporting member banks.....	1,899	2,027	2,047	3,197	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	39,022	38,699	38,527	45,858	††15,999
Other securities held, reporting member banks.....	4,309	4,274	4,227	4,073	††4,303
Excess reserves, all member banks (Wednesday series).....	1,150	1,100	790	872	5,290
Total federal reserve credit outstanding (Wednesday series).....	22,394	22,472	22,636	24,224	2,265

*Preliminary, week ended September 20th.

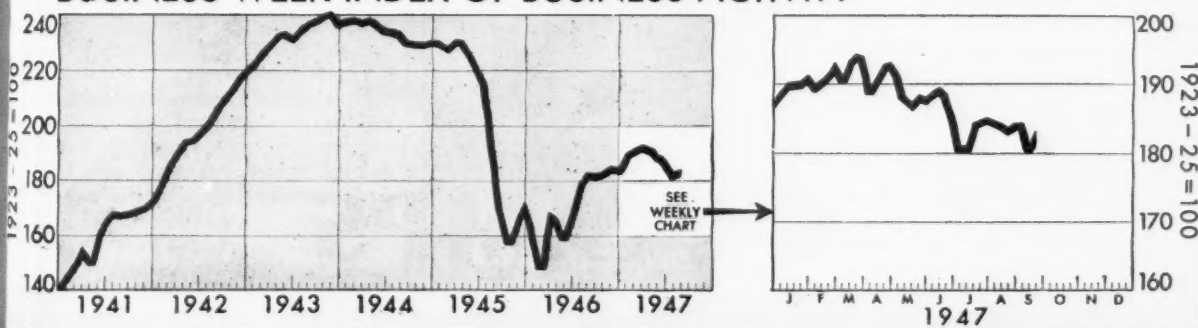
†Revised.

‡Ceiling fixed by government.

††Estimate (B.W.—Jul.12'47,p.16)

§Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



Two ways to have an eye for value in Fluorescent Lamps




1

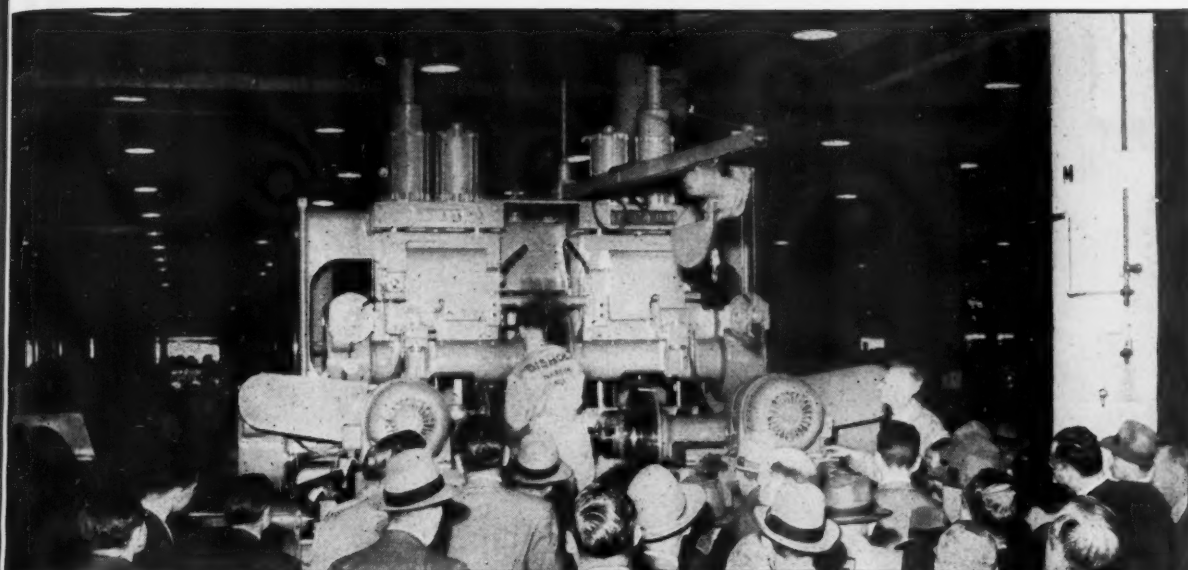
One way (the hard one) would be to get yourself an electronic "eye" like the testing device above. Then you could personally check the color accuracy of fluorescent lamps you buy. General Electric Lamp scientists designed this "colorimeter", built around five sensitive photoelectric cells, to keep an eagle eye on the color values of G-E fluorescent lamps. With its help, color characteristics are checked constantly for uniformity and to compensate for the effects of variation in lamp size and wattage. Actually, the colorimeter is only one of over 480 G-E quality safeguards. So why not take the easy way to fluorescent quality? Just . . .



2

Insist on the  **monogram** whenever you buy fluorescent lamps for office, home, factory or store. You can be sure of full value for your money . . . *because General Electric Lamp research is always at work to make G-E lamps ever better and to make them Stay Brighter Longer.

G-E LAMPS
GENERAL  ELECTRIC



ONE-MAN MAMMOTH: The Gisholt turn-mill requires a single operator, machines a crankshaft forging automatically in 55 seconds

The New Tools: Less Labor, More Output

Exhibits at Chicago show stress the savings from modern production machines. Finer controls, easier operation emphasized.

It's 1950. You are walking through a mighty plant, watching the grinders, shapers, drills, planers. How do they differ from the machine tools of the early 1940's? How did war and post-war change the hum of industrial America?

This week, in the sprawling Dodge-Chicago plant, 100,000 industrialists are packing the Machine Tool Show to see their future. Sparked by the National Machine Tool Builders Assn., 294 manufacturers have piled 2,000 new tools of 220 types into 12 acres threaded by three miles of aisles. It's the biggest industrial exhibition ever held in the U. S., the first Machine Tool Show in a dozen years.

Trend to Speed—Slogan of it could well be: "Time is Money—Save it Here." The \$16-million display emphasizes:

(1) More-automatic equipment. The skill is in the machine—not in the worker.

(2) Easier operation to cut human effort and fatigue, boost efficiency.

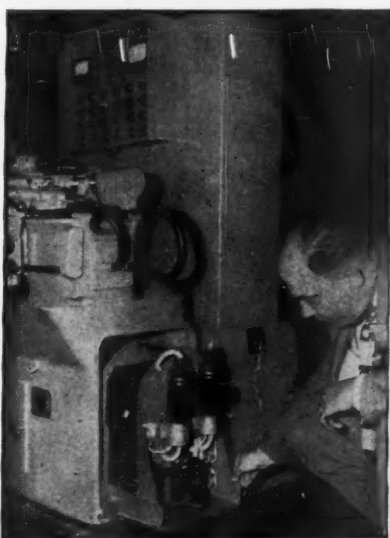
(3) Faster cutting and souped-up cycling to speed output.

(4) Finer controls—electric, electronic, hydraulic—to get finer tolerances.

(5) More compact design to save floor space.

(6) More safety features to cut operator and machine down-time.

Over and over again, these points are hammered into visitors by the displays



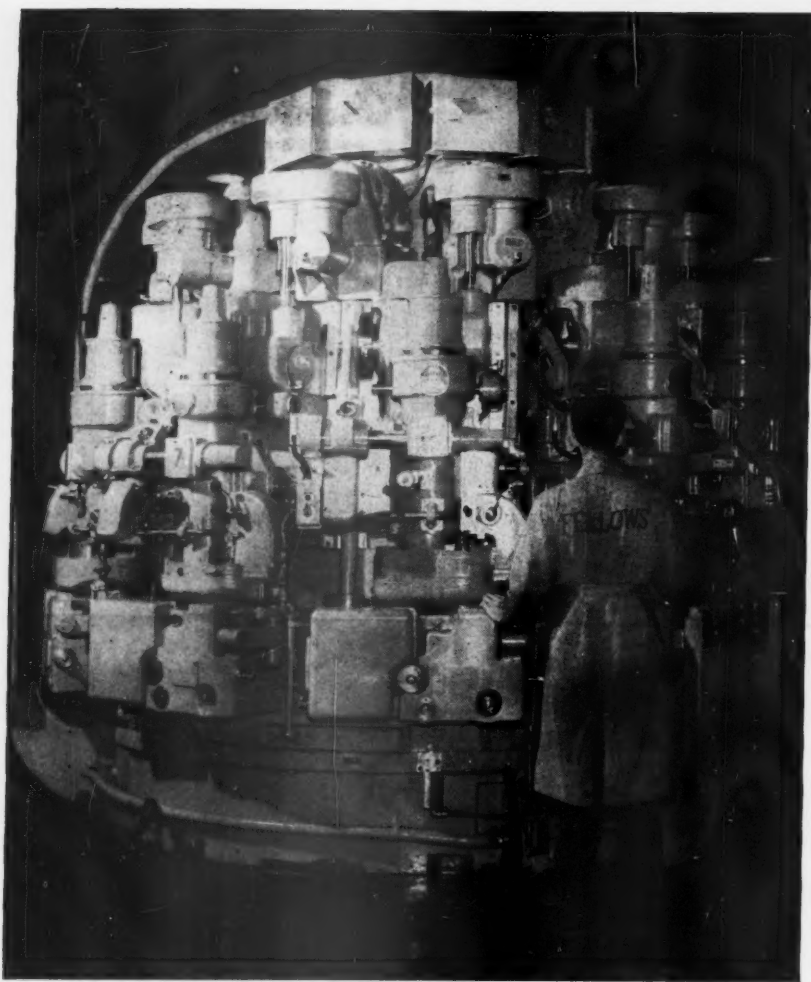
ELECTRONIC DEVICES: K. T. Kuck, Monarch chief engineer, shows how controls in the Speedimatic lathe are easy to service

of the big-name builders—like Hydraulic Press; Jones & Lamson; Mall Tool; National Acme; Norton; Taft-Peirce; Warner & Swasey.

• **Specialization**—The trend to specialization is also clear. That's nothing new to the auto industry, which found out years ago that tools performing multiple operations on a single part pay off in bigger output. Now most everybody is heading that way. Transfer-type machines are getting a big play at the show. These monsters take a single part, requiring several cutting and processing steps, and move it automatically over an integrated line of tools with a minimum of attention and skill.

In another machine (picture, above), electric brains and hydraulic muscles take a complete crankshaft, remove excess metal from the counterweights, and mill the crankpin diameter in 55 sec. The cutters move around the crankshaft as they scrape off metal. Financial requirement: over \$100,000. Human requirement: one unskilled operator. Six of the giants, it's said, can replace 18 ordinary machines and 42 operators on the same job.

• **Ten-in-One**—Another nifty is a gear-shaper (top picture, page 16) that combines in one unit 10 complete gear-cutting machines. Each station has its own motors and timers. The machine will handle 10 different types of gears—external, internal, helical, or spur—



MOUNTAIN OF MOTORS: Ten machines in one, this Fellows shaper cuts gears automatically. It has separate drive and control at each station, automatic chip disposal



ROBOT SORTER: Lonis Polk (right), president, inspects Sheffield gaging machine that handles 2,800 valve seats an hour. It sorts parts dimensionally into 27 classifications

or work on 10 gears of the same type. Only one operator is needed.

• **Pushbuttons**—Big improvements in machine controls strike your eye. Electrical drives offer infinite speed range, allow operation at most efficient cutting speeds. Via electrical control, the operator can pre-set his machine to any desired sequence of operation—all he has to do is push buttons.

Electronics, too, has elbowed importantly into the machine-tool field. Principal uses: in speed control and sizing of parts. One machine (bottom picture, page 15) has its controls mounted on a slide-drawer for ease of access.

• **Hydraulic Controls**—Hydraulic power is much in evidence. It provides the controlled push for moving slides and reciprocating tools—in fact, for any machine with a go-from-me or come-to-me motion.

Some machines combine all the newer control techniques—electronic, electrical, and hydraulic—into one unit. Thus electrical control is used for cycling; electronic circuits for speed control; hydraulic drives for slide movement.

Along with control advances, there's a trend to more instrumentation. Some machines, for example, have ammeters to indicate the amount of current drawn by motors, hence the motor load. Others built-in gages include oil pressure indicators and speed indicators. Many machines have illuminated control panels to give visual indication of machine setting.

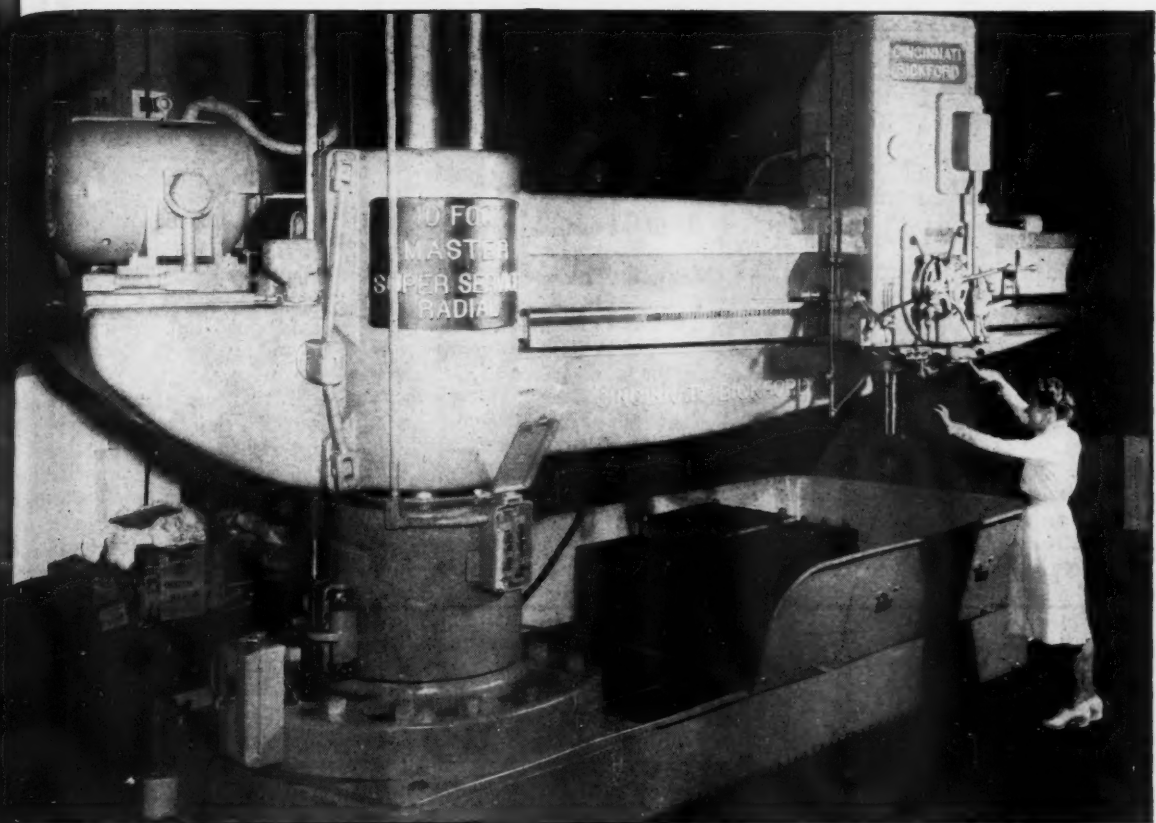
• **Others**—A production man defines a machine tool as a device for removing metal in the form of chips. Such a definition excludes presses, stamping machines, gaging equipment, chucks, and other production tools. Nonetheless, many such appeared at the show. Manufacturers in these lines are just as enthusiastic over improvements as the machine-tool people.

One gaging device, for example, handles 2,800 wafer-like, precision-machined plates per hour, sorting them into 27 classifications (picture, below). No pressure is placed on the parts. After the gaging, sorting, rejecting. When any one station fills with parts of certain dimensional limits, the machine automatically stops.

Flexibility of operation is another widespread feature. More and more machines can do a quick-change act from one job to another. The builders' sales slant on these jobs is that they are economical—particularly on medium-production. For such machines need not justify their existence on mass-production alone; they can fill in on shorter runs.

• **Deliveries**—Standing in the midst of this world of tomorrow, many a visitor grabs for an order blank, then thoughtfully asks: "When can you promise

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BIG BORER: Cincinnati-Bickford's 15-ton radial drill is so finely balanced that it can be moved with the little finger

Usual answer: two to six on standard tools; up to two on specials. However, such estimates are carefully hedged. For no one feels that he is prophet enough to say what the future will bring in the way of steel, castings, and forgings. Demand nonetheless looks good. True, some of the machines on display are one-of-a-kind pilot models not in production. That doesn't mean eager buyers—some from as far as India—from begging for the undelivered (and for quick delivery). At the week's end, the show was a sellers' market. Giddy with the boom, salesmen said they are hoping for \$300-million worth of business in the average annual machine-tool market in the 1935-39 era).

Machine-Tool Industry—The machine tool is the heart of mass-production. It is the great-grandson of the potter's wheel, by way of the lathe. And the lathe, in turn, has its own army of relatives—grinders, milling machines, shapers, drillers, boring machines. Without this venerable mass production of most anything would be impossible—unitwise or otherwise.

Machine-tool producers lead an up-and-down life. Their products live in a terrific age that obsolescence outpaces wear—governs sales. Only the industry in general must out-pro-

duce and out-perform itself does demand soar.

• **Pitch**—The 1947 show is pitched right at that point. Machine-tool builders are, in effect, saying to customers: "Your labor and supplies cost more; your demand is high. You will be wise to become more efficient for the future, while producing more heavily for the present."

If the \$300-million in orders does, indeed, materialize, the machine-tool industry sees its future brightening up. And that will be most welcome, for the recent past has been on the murky side.

• **War Year**—The machine-tool industry went into the war era shipping about \$152-million worth of product annually. In 1942 this figure had bounced to \$1.3-billion.

But the boom didn't last. At war's end, the government started selling its own surplus tools. In 1946, shipments of new machine tools were down to \$315-million—and in terms of postwar prices, that meant a rather alarming drop in units.

During the first seven months of this year, shipments were \$178-million. Toward the middle of the year, however, war surplus sales began to peter out while new demand stepped up. Hence the rate of new orders (in dollars) jumped about 20%. That's fine—though other capital-goods manufactur-

ers are still doing better than the machine-tool people.

• **Future**—Surrounded by their shiny new wares in Chicago, tool builders soberly hope that the horde of industrialists swarming through the show is an omen of a happier life.

Should that hope pan out, America is due for an industrial face-lifting such as it rarely has had before.

BEARING MAKERS FINED

The Justice Dept.'s antitrust case against the ball bearing manufacturers (BW—Mar. 16 '46, p46) wound up this week in a shower of \$5,000 fines.

Six companies, which had not contested the charges in the U. S. District Court at Cleveland, drew fines. They were General Motors Corp.; SKF Industries, Inc.; Marlin-Rockwell Corp.; Fafnir Bearing Co.; Federal Bearings Co.; and Norma-Hoffman Bearing Corp. The court suspended fines on two officials—Charles F. Stanley, vice-president of Fafnir, and Howard A. Johnston, sales manager of Marlin-Rockwell. It dismissed the case against Fred G. Hughes, general manager of the G. M. New Departure Division.

The Justice Dept. had charged the six companies with maintaining price-fixing agreements. According to its evidence, they control about 95% of the ball bearings made in the U. S.

Index Falls Behind

BLS will be two months late with cost-of-living figures for a while, due to budget cuts. Estimates available earlier.

At the very time when complaints about the high cost of living are loudest, the Bureau of Labor Statistics is caught with its cost-of-living index laid up for minor repairs. So you won't know for another two months or more just how high the cost of living is now.

• **Slip Back**—For more than five years, the bureau has been releasing figures toward the end of each month. These showed where its "Consumers' Price Index" (or, in popular terms, the cost of living) stood on the 15th of the previous month. From now on, however, BLS will take from two to three months to collect and add up the thousands of price figures that go into the index. Reason: the big cut made in the bureau's budget.

For the same reason, the bureau will cut down the list of cities for which it issues monthly cost-of-living figures. It has been covering 34 cities in all—21 on a monthly basis; the other 13 quarterly (March, June, September, and December). Under the new setup, while BLS will still cover all 34, only 10 will be monthly. The other 24 will be quarterly; but they will be staggered in groups of eight each month. Thus 18

cities will appear on each monthly release.

This will not affect the reliability of the monthly over-all indexes, according to the bureau; extensive tests have proved that the smaller monthly sample provides just as good national figures as before.

• **Estimates Out Sooner**—The bureau expects to be able to speed up computation of the index some time next year. In the meanwhile, those who watch the cost-of-living figures closely can use the bureau's preliminary estimates, which appear a couple of weeks before the final figures. The final indexes for July 15, for instance, won't be out until early October; the preliminary estimates were released this week.

They show a rise of less than 1% between June 15 and July 15 in the cost of living of moderate-income families in large cities. The family food bill rose only 1½%, as lower prices for fruits, vegetables, and fats and oils partially offset increases in butter, eggs, and meat. Other budget items rose even less than food.

• **What About Today?**—But as every housewife knows, the cost of living has been on the upgrade since July. Dollar eggs and dollar butter hold the headlines today; back in July eggs cost 70¢ and butter 77¢. So these prices have gone up by more than a third in two months.

You can't gage what's happening to the over-all cost of living by just looking at butter and egg prices, however. At the same time that they were soar-

ing, prices of fresh fruits and vegetables sagged.

• **Not Typical**—The fact that while prices of foods are up only 8% in the past two months proves that butter and eggs are exceptions. Wholesale prices always jump around more than retail prices paid at the grocery store. A food share of the cost of living is something less than 8%. Experience the past few years shows that retail prices rise about 7½% when wholesale prices advance 10%. On that basis, the family food bill was about 6½% in mid-September than it was in July 15.

If that estimate doesn't jibe with your own experience, remember that the cost-of-living figures are based on typical budgets of wage earners in moderate-income families living in large cities. If you eat more butter and meat than the typical budget calls for, your grocery bills will be that much higher.

Food makes up about 43% of the typical moderate-income family budget. So, if other prices stay the same, a 6% jump in retail food prices will boost the cost of living index by only 2½%.

• **Less Severe**—Food prices aren't the only ones that have been rising since July, of course. But price boosts in other items such as clothing and rent, and things, like electricity and tires, have been even less now than then. Thus, the food portion of the cost of living probably not more than 2% higher in July.

All in all, the maximum increase in the cost-of-living index between July 15 and September 15 is 3½%. That's a far cry from the increase of more than 10% in butter and egg prices.

• **Looking Ahead**—But it's still a substantial rise. It would bring the cost of living costs since the first of the year up almost 6½%. If living costs were to continue rising at that pace, they would be up 20% by a year from now. That's almost as much as they have gone up since the end of price control.

Few business analysts expect that living costs will rise by anything like that in the next year. On the contrary, they are good grounds for expecting a moderate decline in food costs in the near future (BW—Sep. 20 '47, p116). So many business forecasters think the cost of living may even be a little under the prewar level by year's end.

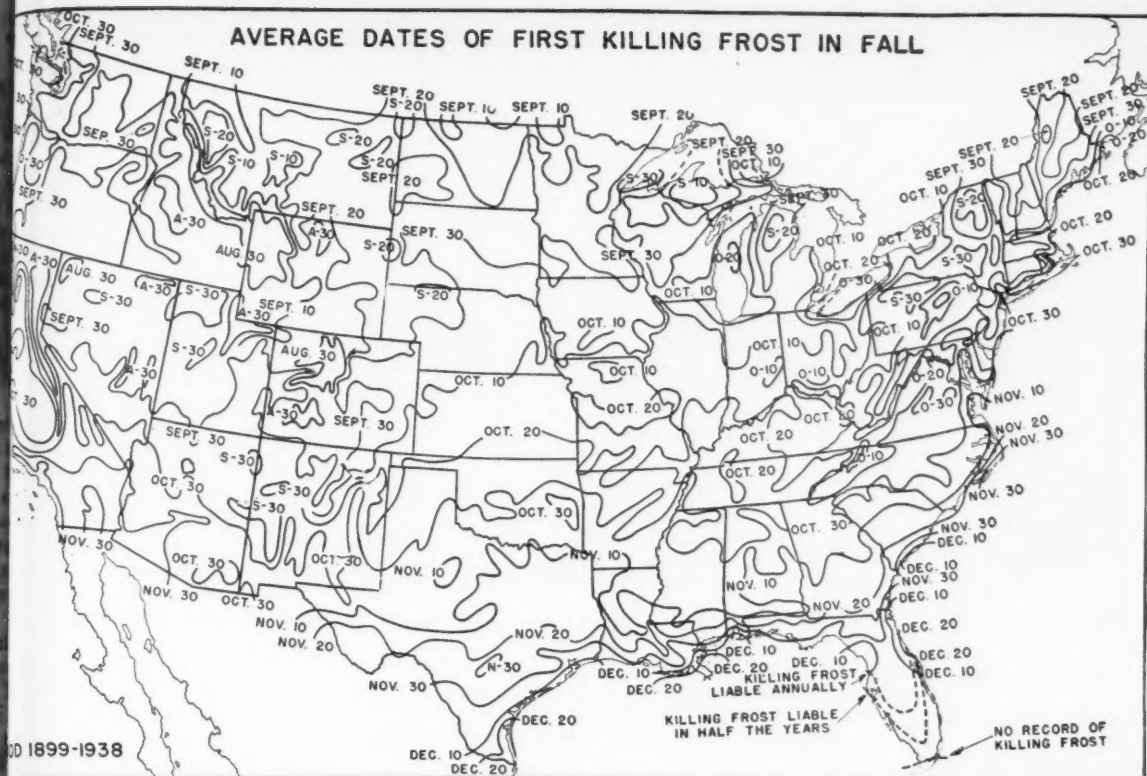
• **Impact**—However, the significant factor for business in general is that few people look for any real drop in living costs soon. So the squeeze on low-income families will continue. This will cut the market for nonessential consumer goods. What's more, the high cost of living will add to the steam behind demands for wage boosts (BW—Aug. 27, p15).



BARN WITH WINGS FOR THE MILKY WAY

Like the birds, cattle are flying south. With one of its clippers converted into a cattle ship (above), Pan American reports that it has carried three shipments of fancy stock from Toronto to Argentina and Uruguay. The 80-head Canadian herd of Holstein-Friesians, valued at \$150,000, will be used to improve South American dairy herds. Reason for the airborne service: savings in attendants' salaries, fewer stock losses from seasickness than would result from a long ocean voyage. The flights, via Miami, took two days each.

AVERAGE DATES OF FIRST KILLING FROST IN FALL



Weather: Key to the Cupboard

Dates that frosts strike in Corn Belt, and amount of soil moisture in Winter Wheat Belt, will determine next year's food and exports. Outlook for corn quality improves.

great continental weather factoring out two products these next year's food prices and next food exports.

It started the weather wheels was (1) last week's hurricane, turned north into Louisiana, and great mass of cold air that hung over Montana.

Possibilities—The hurricane might pulled the cold mass down into the Corn Belt—where a freeze would be disastrous. It might have heavy rains in the Winter Wheat Belt where rains would have done tremendous good.

neither the worst it could in the Corn Belt nor the best it could in the Winter Wheat Belt. But it was a strong factor that events beyond the reach of congressional investigations or Administration policy are shaping the living situation in the year ahead.

Dept. of Agriculture said in a report last week that prospects for quality corn have improved. Hot drying winds have been

over much of the Corn Belt since the Sept. 12 survey, on which last week's report was based. So some federal officials predict that the danger of "soft corn" is almost whipped. Soft corn—with prematurity moisture sealed into it by frost—has a lower feed value than well matured corn, and does not keep so well.

In the Sept. 1 crop report, the department expected four out of every 10 bu. of corn in the Corn Belt to be damaged if frost came just one week early. Now they think that, if severe frost in the main producing areas holds off until Sept. 30, the crop generally will be of good quality. The later report, coupled with the possibility of reduced wheat shipments to Europe, helped to put the skids under rising grain prices for three consecutive days on the Chicago market.

• **Danger**—But a killing frost could still do lots of damage. Frost one week before maturity will make 100 bu. of corn be worth only 89 bu. in feeding value. That's a loss of anywhere from 125 lb. to 200 lb. of pork.

Much corn of lower feeding value will be fed to Corn Belt hogs and cattle.

If there's too much of it, what's left of the high-moisture corn will be dumped on the market before hot weather starts it spoiling.

• **Critical Area**—The special report puts Ohio and Indiana in the top danger spot. Last spring's weather caused unusually late plantings there. Only 21% of the Ohio crop and 31% of the Indiana crop are safe from frost damage in the report. Together they'll supply 318-million bu., almost an eighth of the nation's supply. Killing frosts can be expected, on the average, from Oct. 5 in the northern areas of these states to Oct. 20 in the south (map).

Wheat

About Oct. 15 four men will start from Topeka on soil-testing trips. They will meet a few days later in western Kansas—having made some 350 observations of soil moisture conditions to a depth of four feet.

H. L. Collins, Bureau of Agricultural Economics statistician in charge at Topeka, will compile and analyze the reports. It is a vital job. The findings from these annual October journeys have often proved a more accurate indication of winter wheat yields than the regular crop reports of the following December or April.

• **Bellwether**—Total U. S. wheat output goes as the Winter Wheat Belt goes. This area is roughly egg-shaped, with the mid-point of Kansas' western border as the center. The region has produced



BUB-O-LOONING at the broadcasters' parley was fun, coping with other pressures was not. Left to right: Justin Miller, N.A.B. head; Frank Stanton, CBS; Charles R. Denny, FCC

three tremendous crops in successive years. Its bumper yield made possible 1947's record U. S. total of 1,428,000,000 bu. of wheat.

But after this year's harvest, reserves of nitrogen in many fields are low. Record harvests have also been at the expense of normal summer fallow.

• **Drought**—To top these accumulating strains on an area which has always had wide variations of output, the normal period of moisture replenishment after this year's harvests was a period of drought and excessive heat.

July, August, and most of September did not restore soil moisture to the favorable conditions of last year. And vast stretches of land are still waiting for the inch of rain which should precede fall planting.

• **Gamble**—Despite these conditions, our food-policy makers are gambling on another big yield. The Administration started by asking for plantings on 75-million acres for the combined wheat crops of 1948.

Suppose yields from this acreage equal the average of the past 10 years. There would then be 800-million bu. for domestic use and about 270-million bu. for export. But export needs are expected by Secretary of Agriculture Clinton P. Anderson to be about 350-million bu.

If the 1948 yield comes up to the average of the past six years, the strain on supply would not be so great. Domestic use could go to 850-million bu.; there would be 350-million bu. for export and carryover.

• **Tipoff**—An indication of how this production gamble is likely to turn out will come at the end of October when Collins analyzes the Kansas soil tests.

Last October, Collins and his crew found soil moisture to an average depth of 44.3 in. If they find the average depth 36 in. or more this year, we can count on a good start for the 1948 battle of grain production.

New Radio Code

N.A.B., preparing rules to cut lengthy commercials, meet other criticisms. Big question: Will advertisers accept them?

The nation's broadcasting stations are preparing to put into effect a new industry code. But they aren't gleeful about it, for the code would clip both their program practices and their pocket-books.

A proposed draft was adopted by the National Assn. of Broadcasters' board of directors after last week's convention of the organization in Atlantic City. It still is subject to change by the board. But a final version is scheduled to go into operation next Feb. 1 on contracts signed on and after Sept. 19. It lays down strict "thou shalt nots" for the industry and for its clients.

• **Watched**—The idea is under scrutiny from several sides. The Federal Communications Commission is watching it closely. And FCC Chairman Charles R. Denny has already warned that the code will be used against nonconforming stations when they come up for license renewal.

There are the customers to think about, too. From that quarter comes the warning: "Don't get so commercially pure that your medium is too difficult to buy."

On top of everything else, adoption of the code comes at a time when the U. S. Dept. of Justice is casting a dubious eye on any trade association action.

• **Objectives**—N.A.B. wants to silence the critics of radio—sincere and captious alike. It wants to keep programs inoffensive, but still entertaining. It wants to cut a slice out of the time devoted to commercial announcements, without detracting from the power of the spoken

word to sell commodities and...
• **Commercial Limit**—None of the code is a three-minute limit on commercial time in a 15-minute program. This formula applies in about the same ratio to programs of other lengths.

Agency men are quietly passing word around that they want three minutes and 15 seconds as the commercial base. This is about par today for most and most of the better stations. Broadcasters counter hopefully with the suggestion that smarter handling of commercials by agencies would be more effective and less irritating in the shorter time.

• **No Double Spots**—The new code aside only 30 seconds for the use of a station or network out of every 15-minute segment bought by an advertiser. It makes the non-network stations look red all over their ledgers. They can't sell a block of 13 minutes and 30 seconds, for instance. That leaves no time for a one-minute spot commercial, station identification, and a brief commercial break plug.

Under the code, however, that would be "double spotting," and there's a large on the practice. Some of the smaller stations are fighting this part of the code. They argue that a one-minute commercial plug and a station-break service announcement such as a sponsor's weather report should not be lumped together, but they agree that two long spots and announcements should not run too close together.

• **Ban**—The proposed code bans dramatization of political and controversial issues on the ground that skilled identification would be emphasized by the code rather than the issues themselves. Charges of this restriction are labor union criticisms.

Other code provisions cover language of race and creed, profanity, matters of crime and horror dramas, simulated news, gambling odds, child program, and "hard" liquor.

• **Delegation of Power**—N.A.B.'s board of directors has the power under the association bylaws to set up and enforce a code. The board has directed its directors to send in all their ideas by Nov. 1. Plan now is to hand down the final version of the code after the board's November meeting.

One important element will be enforcement teeth. Dept. of Justice clearance must be obtained before any enforcement techniques can be devised, even if they amount to no more than a seal of approval.

• **Tried Before**—This isn't the first time broadcasters have set up a code. In the twenties, a set of policies was adopted. It was revised in 1935 and abandoned in 1945—when the industry fired several shots at a clause prohibiting sale of time for discussion of controversial issues. Since that time the broadcasters have had a milk-toast set of policies, with no official industry seal of approval.

Rate War On

New cargo tariffs filed by war lines bring quick finish—pledge by young independent airfreighters.

in the air came back to America in vengeance last week.

bombs, but air cargo rates, were hanging in what promised to be a long, drag-out fight between airlines and the Independent Flight Assn. The association is made up of six cargo-carrying lines—staffed by war veterans—who started the war as nonscheduled contract carriers.

One—Opening gun of the battle was fired when Slick Air—biggest all-freight carriers, cut its rates to 12½¢ a ton mile (BW—47,p26). Nineteen scheduled airlines promptly fired back by dropping cargo rates 25% to about 20¢ a ton mile.

Two—Now three lines—American Capital (PCA), and United—have new tariffs bringing their rates on a wide range of commodities down another 33½% to 12¢ a ton mile, effective long soon. This means, for example, that a ton would fly 1,000 lb. from coast to coast for \$159 instead of \$250.

Three—As president of the Independent Airfreight Assn., Earl F. Sizemore (BW—Nov.16'46,p8,42) promptly charged out at "destructive, subsidized government attempting to drive the overflight industry out of business." He says, "this group would carry airmail without subsidy at 18¢ a ton mile in place of present rates of about 45¢, or airfreight requests to CAB for \$1.

Independent Victory—Slick asserted the war started in July, 1946, when American Airlines set up its Contract Cargo Division. But, he added, "the independent airfreight lines kept their independence and the specially organized carrier (American) abandoned the war project." American has will be its Contract Cargo Division.

Slick charges that the passenger lines are again offering destructive rates because they can temporarily afford only a surplus created by their government subsidy and which the airfreight lines, standing entirely on its own, cannot afford." In making the offer to carry mail on its present routes, Slick reported that these six lines carried nearly 20-million ton-miles of cargo in the first half of this year. That contrasted with the 124-million ton-miles of cargo carried by the passenger lines.

Freighters' Merger—As the air war heated up, two of the six independent

cargo carriers are joining forces in making a very formidable foe for the passenger lines. Slick and California Eastern Airways have just completed merger plans. Slick, operating 14 Curtiss C-46 Commandos with 10,000-lb. capacity each, has three flights daily from California and Texas into Newark Airport; California Eastern, with four Douglas C-54 Skymasters of 18,000-lb. capacity, has two daily schedules from Oakland to Newark. Together, the lines fly better than 3-million ton-miles a month.

CAB Lays Blame

Board's report on United's DC-4 crash May 29 says plane's controls were frozen because the gust lock was on.

Failure to release the gust lock of a United Air Lines DC-4 before takeoff at New York's LaGuardia Field last May 29 "froze" the controls. Result: a crash at the end of Runway 18, killing 43 persons (BW—Jun.21'47,p18).

That was the verdict last week of the Civil Aeronautics Board.

• **Redesign Urged**—The gust lock is a device worked from the cockpit. It prevents control surfaces from flapping and damaging themselves in gusty winds when the plane is on the ground.

In a detailed report, CAB recommended redesign of the gust lock by Douglas Aircraft Co., the plane's maker.

• **Summary**—CAB's report summarized the circumstances of the accident:

"The gust lock was on while the DC-4 taxied to the end of the runway prior to takeoff, because of gusty winds ahead of an approaching line squall.

The takeoff run was begun hurriedly (to get off before the squall hit the field) after a delay at the end of the runway in obtaining an airways traffic clearance. This delay would have given time to reapply the gust lock—after the normal cockpit check showing it had been released.

Due to a modification, this particular gust lock could remain up (locked) without the use of red warning tape. The tape is normally wound around the control column and fastened to the lock handle to indicate that the lock is on and controls are frozen.

The plane attained a speed of 112 m.p.h. on the runway, more than enough to get into the air. But not even the nosewheel (normally the first part of the plane to leave the ground) left the runway. The plane also failed to respond to heavy left braking in an attempt to groundloop—indicating the rudder was locked in neutral.

• **Other Troubles**—The board also criticized what it called other failures of



"BUYING" VOTES

Some 30,000 residents of the Carrollton section of New Orleans have gone to the "polls"—in neighborhood stores—to elect an honorary mayor and council. But the real concern was the voter, not his vote. Election backers were merchants, who wanted to get new customers acquainted with their stores.

Store owners comprised the two tickets. Anyone could vote—provided he was over ten years old. In view of the heavy turnout, promoters pronounced their campaign a success.

personnel and procedures. While not vital in this particular case, CAB said, they could easily cause other fatal accidents. Among these were:

• Failure of the pilot to check weather reports of the approaching storm—because its arrival at La Guardia was forecast for 7 p.m. and his takeoff scheduled for 6:30 p.m. Actually, due to various delays, he began takeoff at 7:04, when the storm was bearing down on the field.

• Overloading of the plane by 3,469 lb.—due to incorrect application of civil air regulations by United Air Lines and failure of the Civil Aeronautics Administration to check either United's or any other airline's calculations of gross takeoff weights.

• Failure to include temperature effects in the civil air regulations for transport plane takeoff weight (BW—Aug.9'47,p20).

• Failure to allow for runway grade and obstacles at the end of runway in calculating maximum takeoff weights.

VIENNA IS BATTLEGROUND OF EAST AND WEST

Ralph Smith, editor of *Business Week*, is in Europe cataloging the important problems—and the possibilities of their solutions—for business and management men. From Vienna he cabled this week:

VIENNA—In a room on an upper floor of a great Viennese business building—once an Austrian bank—American correspondents sit around a table listening to the patient voice of a rather elderly, rather fatherly man in uniform.

He comments a little wearily on a release given to each correspondent.

"On the first subject, as you'll see, the opposition disagreed and wanted a letter of censure sent to the Chancellor. . . ."

"This other matter again got no assent from them, so further consideration of it was dropped. . . ."

"The last point—well, of course, that's one on which they've bucked right along. . . ."

His voice trails off. He has obviously said the same thing so often.

• **Front Line**—It is a somnolent hour. You wouldn't know that this is the front line, that what you are hearing is a battle report.

But if you are American, you had better recognize an American headquarters briefing on an Allied Council meeting in Vienna by Lt. Gen. Geoffrey Keyes, U. S. High Commissioner in Austria, for what it is.

For "the opposition" and "they" read "the Russians."

This is the war between East and West.

• **Russians**—In Austria, there's an indigenous national government under Four-Power supervision, its activities providing unavoidable ground for dispute. Vienna's center is "Four-Power City," under common rulership by the "liberators." In Austria, the Russians have got to perform in the open, even if their planning is secret.

They started by performing on the political stage, hopefully using the familiar tactics of propaganda and pressure. That lasted until the Nov. 25, 1945, election—when the Communist Party got only 5% of the vote. Then they shifted to economic tactics.

• **Weapons**—For economic warfare, the Soviets are in possession of strong weapons. About 60% of Austria's normal production of agricultural commodities is in the Red Zone. Thence comes practically all of the nation's oil. And, while most heavy

industry lies in the west, Russia holds the finishing industries.

These weapons have been wielded vigorously. Crops that should feed hungry Austrians are levied for Russian soldiers. Farm yields are drained for Russians back home.

Most important, the Eastern Zone output from farms, oil wells, and factories is taken out of the Austrian economy under what may be a history-making Russian interpretation



Ralph Smith

of the terms of a Potsdam agreement on German external assets.

• **"Reparations"**—At Potsdam, the United States and the United Kingdom renounced all claims for reparations from the clearly confiscable German enterprises in eastern Austria. The U.S.S.R., left on its own, proceeded to claim everything that could be accused of having a German taint. Russia paid no heed to American and British contentions that (1) many of the properties were transferred to the Nazis under duress, and (2) regardless of eventual ownership decisions, all property in Austria should be used for the benefit of the Austrian economy.

The whole episode epitomizes Russian strategy. Aside from what they get for their own economy out of such seizures, they definitely get an opportunity to twist the Austrian economy. Thereby they hope to confound the reconstruction aims of the Americans and British.

Russian operations in the Allied Council in Vienna are part of the same pattern. The stand of the "Soviet element" has brought meeting after meeting to the same familiar

end-note: "No agreement was reached among the Four High Commissioners and the discussion was finally terminated."

• **"White" Warfare**—Where all the "white" warfare will terminate depends chiefly on America's ability to keep its head and play the hard game. No one here worth listening to believes it will end in "red" war in the foreseeable future. But those who scout this danger insist that the West can lose Europe in a "white" one—and that such a loss starts with Austria.

To the all-important question—"What have we got on our side for such a trial by attrition?"—you'll get in Vienna answers like these:

"Ruhr coal to keep them from using Polish coal as a weapon."

"Their eastern properties are running out of assets which only the West can supply."

"They have a stake in their reputation for adhering to explicit, detailed contracts—and to nothing else. If we talk long and smart enough, we can push them down to the hardpan of written agreements."

"If we'll pay enough to sit out the confusion, even the Russians must yearn for a settlement that gives them something definite and permanent and creates a better atmosphere for their political propaganda—which won't get anywhere in Austria, anyhow."

These are obviously dubious answers. But so is the military man's "more divisions and planes over here—that's the only kind of thing the Russkies understand." We have got to beat them at a more subtle game.

• **Bright Note**—The only bright note in all the talk in Vienna is to be found in the comment of a Russian official on the subject of his nation's "monolithic planning." As related by a member of the treaty commission, he said:

"Think of a bordello on Saturday night. Then imagine a bordello on Saturday night on fire. Then picture a bordello on Saturday night on fire without any water. Then consider a bordello on Saturday night on fire without any water hit by an earthquake. That's the state of confusion we're in."

It's too bad that so plausible a statement must be suspect. On it showing, Russia looks tough, determined, consistent, and shrewd—four qualities which Vienna recommends to Washington.



Bouncing Ben, the buyer for a merchandising chain, has to travel quite a lot and buy with might and main. He bounces into Pittsburgh crying: "Here I buy my best, 'cause Statler's Hotel William Penn sure treats me like a guest."



2. "Perhaps it is the good night's sleep I get in Statler's bed, with its eight hundred springs and more, that keeps me out ahead. I bounce out every morning, fit to set the world on fire. If Statler beds are ever sold, remember, I'm a buyer!"



"The Statler bath," says Ben, "I find a treasure beyond price. I like the stacks of snowy towels, and all that soap is nice. But after a tough day at work, the thing that really counts is soaking in a Statler tub—'cause that restores my bounce."



4. Ben bounces to the dining room, a grin from ear to ear. Says he, "I've never had such food as Statler serves me here. They've all my favorite dishes and some swell ones that are new. I surely wish that I could buy a Statler chef or two!"



"I like the swell location, too; the Hotel William Penn is really in the heart of town," says bouncing buyer Ben. "Their hospitality is tops . . . they treat me so darn well that if I had sufficient cash, I'd buy the whole hotel!"



HOTELS STATLER IN BOSTON • BUFFALO • CLEVELAND
DETROIT • ST. LOUIS • WASHINGTON

STATLER-OPERATED HOTEL PENNSYLVANIA HOTEL WILLIAM PENN
NEW YORK PITTSBURGH

P. S. Here's a tip for your trip! Try to plan your visit to a Statler for Friday, Saturday, or Sunday—that's when you'll have the best chance of getting the kind of accommodations you want!

Packing Costs Reduced 80%

Commander Door Inc. bundles overhead garage doors with great savings of lumber and labor—using Acme Steelstrap methods



This is the Acme bundling method which saves 80% for this manufacturer! Requires minimum of lumber, time, and labor. A few feet of Acme Steelstrap, some protective wrapping, and the job is done!



The 4 sections of the overhead-type doors in this garage are now shipped as a unit.



More savings ahead for Acme Steelstrap users—No. 3 Steelstrapper, the lightest tool made, is now available. Magazine holds 100 seals. Tensions, seals, and cuts the strap in one operation. Small base requires only 5-inch strapping surface. Two levers working in opposite directions make for better balance and easier handling.

• The Commander Door Inc., Holmes, Pa., used to ship the four sections of its prefabricated garage doors crated by sections.

As production increased, faster methods of bundling these sections became imperative.

Acme Shipping Specialists recommended packing the whole door as a unit with Acme Steelstrap and protective wrapping.

Now customers receive doors in perfect condition, yet Commander Door Inc. saves 80% of packing costs! Also customers benefit from reduced freight weights.

Ready to Work for You

This case study is not unusual. Acme methods are producing similar results for many leading manufacturers. Why not put them to work for you?

For more information on how Acme can help you, just clip and mail the coupon for the free booklet, "SAVINGS IN SHIPPING."



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• Acme Steel Company, Dept. BW-927
2838 Archer Avenue
Chicago 8, Illinois

Please send me a copy of your case history booklet, "SAVINGS IN SHIPPING."

• Name.....

• Company.....

• Address.....

• City..... Zone..... State.....

ACME STEEL COMPANY

**ACME STEEL CO.
CHICAGO**

NEW YORK 7

ATLANTA

CHICAGO 8

LOS ANGELES 11

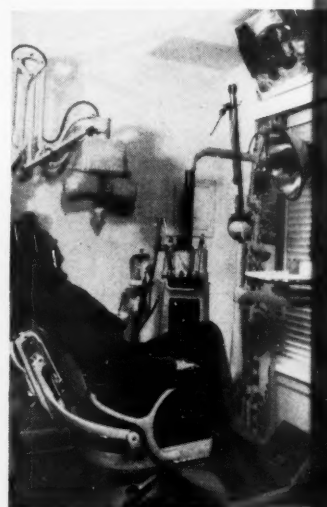
Baseball Pensions

Everybody's satisfied with first year's operation of players' annuity plan. Club contributions to fund ruled tax-deductible.

Tear-jerkers in the Sunday supplements about once-great baseball players going to the poorhouse will be scarce and scarcer from now on. Hereafter there will be pensions for the big wheelhorses that the big leagues turn out to pasture.

At the end of the first season of operations under the new annuity insurance plan, both the 16 major league ball clubs and the Equitable Life Assurance Society (which set up the plan) are satisfied that they have a smooth-running, workable system. To make the picture complete, the U.S. Treasury has just given the whole thing its final approval. This makes contributions by the clubs to the pension fund tax-deductible, and insures indefinite continuation of the plan.

• **Pressure**—Work on the pension plan began not long after the end of the war. Its final adoption was one of the steps that the clubs took to meet complaints from the players and to stave off the



PLEASANT DRILL

Patients forget their jitters in the dentist chair while they enjoy 16-mm. sound movie program. Children go for Donald Duck, men pick prize fights, women want to see the latest styles, according to Dr. Charles Graves Jr., young San Diego dentist.

A headset deadens the burr of the drill, brings the movie sound



Are cost-heavy systems ruining the outlook for YOUR profits?

At this stage of the game, you can't afford to let Cost-Heavy Systems clutter up the horizon—profits have suffered enough already. That's why so many businesses today are reducing *controllable costs* by simplifying paperwork systems and routines.

EXAMPLE: One firm (typical of many helped by Remington Rand) modernized their filing systems. Results:

1. Profits up, losses down, for executives now act on facts that are instantly available, always complete, due to closer control over

filing of correspondence, price quotations, cost figures and other essential data.

2. Clerical savings (and big!) effected through faster, more accurate handling of papers and elimination of costly overtime.

Are your costs high in filing . . . production . . . inventory . . . sales . . . or ledger? Remington Rand simplified systems can boost your profits by reducing *controllable costs*. For free Filing Manual (LB 218) write Remington Rand Inc., Systems Division, 315 Fourth Ave., New York 10, N. Y.

Simplify and save
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ARGENTINA

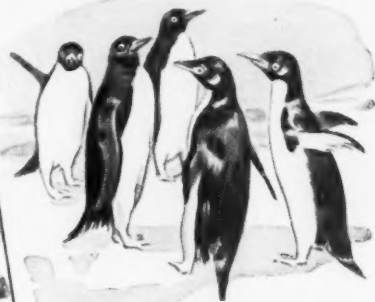
FOURTH LARGEST NATION IN THE WESTERN HEMISPHERE, ARGENTINA HAS AN AREA OF ABOUT 1,100,000 SQ. MI.; POPULATION ABOUT 16,000,000.



FAMED FOR FOOD--ARGENTINA IS WORLD'S LARGEST EXPORTER OF BEEF, CORN, AND LINSEED OIL; SECOND LARGEST EXPORTER OF WOOL AND WHEAT.



COLORFUL CHARACTER--HIS GAY COSTUME, SUPERB HORSEMANSHIP AND ADVENTUROUS LIFE BROUGHT WORLD RENOWN TO THE GAUCHO (ARGENTINE COWBOY)



PARROTS TO PENGUINS--EXTENDING 2300 MILES NORTH AND SOUTH, ARGENTINA TOUCHES BOTH TROPICS AND ANTARCTIC, HAS ALMOST EVERY KNOWN CLIMATE AND 10% OF THE WORLD'S PLANT SPECIES.



TOUGH TREK--TO ASSURE ARGENTINA'S LIBERTY, JOSE SAN MARTIN, EARLY 19TH CENTURY GENERAL, MARCHED A 5,000-MAN ARMY OVER 13,000-FOOT ANDEAN PASSES TO VICTORIES WHICH ALSO LIBERATED CHILE AND PERU.



CATTLE RUSH--REFRIGERATION FIRST PERMITTED SHIPPING CHILLED AND FROZEN BEEF OVERSEAS IN 1876... STARTED "GOLD RUSH" FOR ARGENTINA'S GREAT WILD HERDS OF CATTLE AND VAST, FERTILE GRAZING LANDS (PAMPAS).

Argentina and most of the principal countries around the world can be reached by telephone. A three-minute conversation between the U. S. A. and Argentina costs \$12 on week-days; \$9 on Sundays.

Bell System OVERSEAS Telephone Service



threat of unionization in baseball (Aug. 17 '46, p. 82).

Before it could set up the system, Equitable had to work out some wrinkles in pension planning. It's expected to give the impression that it's all in a day's work to them, but to admit that they consider the matter something of a showpiece.

• **Problems**--At first glance, major league baseball looks like a pitcher's nightmare. Players may shift from minors to majors and back again once but several times. Managers shuffle them around among the clubs or throw them out on option. The working life of most players is relatively short.

Equitable solved many of these problems by working out a system that treats major league baseball as a whole instead of trying to set up an independent plan for each club.

Under the plan, each player contributes \$250 a year. The club matches with another \$250. The proceeds of an annual all-star game and the proceeds from the sale of broadcasting rights in the World Series also go into the fund. If the time comes when the payments do not cover the annual cost, each of the major league clubs will make up one-sixteenth of the difference.

• **Eligibility**--All players with more than 60 days' service in the majors are eligible to come under the system. Coaches and trainers (but not managers) also qualify.

Until he has rung up five years' service, a player is covered by life insurance (\$5,300 face value) but he has no permanent pension rights. If the club drops him, he gets his own money but no pension. After five years' service he gets fully vested rights to an annuity. The minimum pension is \$50 a month. This increases \$10 a month for each additional year of service, up to a ceiling of \$100 (10 years' service). Service before Apr. 1, 1947, when the plan went into operation, counts in qualifying years.

• **No Connection**--Salary has nothing to do with the size of benefits. Babe Ruths and the Bobby Fellers won't get any more than the utility infielder one jump ahead of the minor leaguer.

The pension will start when the player reaches the age of 50. If he is out to grass before then (as most players are) he still can't start drawing anything until he meets the age requirement. The monthly annuity, once it starts, is payable for life with ten years' certain. That is, if the player dies before he has received 120 monthly payments, his widow or other beneficiary is entitled to the unpaid installments.

• **Expensive**--Cost of the plan runs high in comparison with most industrial pension systems. For one thing, the retirement age is lower, and the contribution life of the players is shorter. Also, the contribution of the players is fairly modest by insurance standards.

Do you recognize this store?



What is the difference between this store and hundreds of other modern stores in up-and-coming American towns?

There is *only one* important difference. This happens to be a "company-owned" store in a bituminous coal mining community. It carries a large, diversified stock of merchandise—everything from living room suites to six-for-a-nickel notions. And its prices and merchandise have to be "right" to compete with the other stores in the same area.

Not every mining town can boast of a store as good as this one. But it does illustrate the progress that is being made in bettering the living conditions of coal miners. And that, of course, includes *homes* as well as stores. Did you know, for instance, that today about *two-thirds* of the nation's bituminous coal miners either own their own homes or rent from private landlords? And that among the remaining third who now rent from their companies there is a growing trend to buy the houses they live in?

MODERN WORKING CONDITIONS have also come a long way—due largely to the mechanization program sponsored by the country's progressive coal operators. Nowadays, more than 90% of all bituminous coal mined underground is mechanically cut, and more than 50% is mechanically loaded. Only about 5% is mined by pick and shovel.

Thanks to huge investments in mechanized equipment and to skilled management and keen competition within the industry, America's bituminous coal mines are the most productive—and pay the highest wages—in the world. They are able not only to meet this country's stupendous needs for coal, but also to help rebuild the war-shattered economies of other nations.

BITUMINOUS COAL

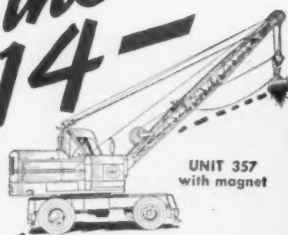
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Washington, D. C.

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BITUMINOUS COAL . . . LIGHTS THE WAY . . . FUELS THE FIRES . . . POWERS THE PROGRESS OF AMERICA

**2 MEN
Do the Work
of 14—**



UNIT 357
with magnet

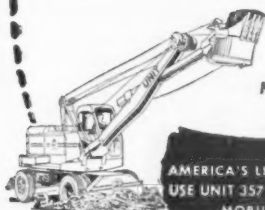
UNIT 357 MOBILE CRANE
LIFTS—LOADS—DIGS—HAULS

1 OPERATOR AND 1 HOOK-UP
MAN CAN DO THE
WORK OF 14

RIDES ON RUBBER
TRAVELS ON ITS OWN POWER

FULL VISION CAB
OPERATOR SEES IN
ALL DIRECTIONS

UNIT MOBILE CRANE
used in yard of large
automobile plant.



UNIT 357
Mobile Shovel



AMERICA'S LEADING PLANTS*
USE UNIT 357 SELF-PROPELLED
MOBILE CRANE
*Names given on request.



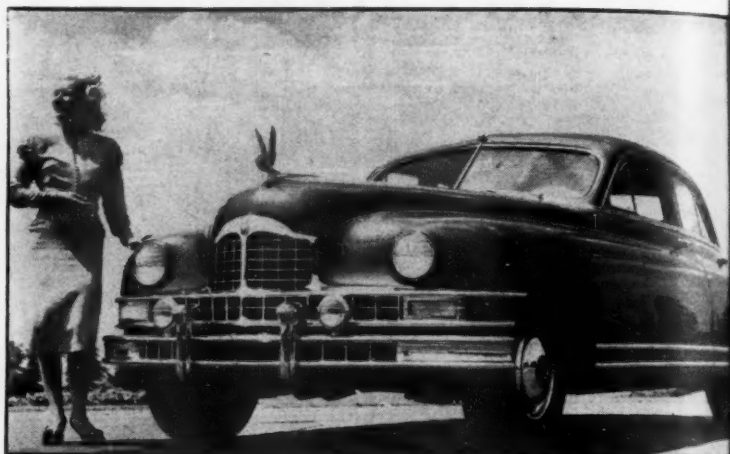
UNIT 357
with bucket

Write for literature showing
UNIT'S many modern and ex-
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AUTOMOTIVE



PACKARD CUSTOM EIGHT: proudest of the company's 1948 fleet

1948 Models Make Their Bow

Packard leads parade with 17 restyled bodies, all straight-eight engines. Hudson closes for switchover, promising extensive changes. Kaiser-Frazer announces a de luxe Kaiser

The new-model season got under way in the automobile industry this week. Packard Motor Car Co. unveiled its 1948 line of cars—a group of 17 newly styled body types powered by three new straight-eight engines of 130 hp., 145 hp., and 160 hp. At the same time, Hudson was closed for changeover to new models which will make their bows in a month or so.

• **Some Prices Down**—Prices on some of the new Packards, marking the first straw in that wind, run lower than on comparable 1947 types. The 1948 super-eight club sedan is quoted at \$2,665 delivered in Detroit, state taxes extra. This is about 3% less than the \$2,747 for the same 1947 entry. Others are also reduced in that proportion. But some are unchanged and a few—particularly those which did not figure in the last announced advances—are higher.

The new straight-eight engines will be standard on Packard passenger cars.

The company will continue to make sixes, however, for taxicabs and for export. This is part of Packard's diversification program which includes marine engines, industrial engines, and experimental work on turbojet for aircraft and guided missiles.

• **Disappearing Seats**—Included in the standard line is a station sedan with all-steel body and top.

All 1948 Packards are equipped with a new "Comfort-Aire System." Fresh air

enters through two ducts, leading the grille to the front compartment. This permits adequate ventilation in a driving rainstorm.

The 1948 models represent the first share of a \$20-million program unveiled by Packard at the end of the war. Production on them began early this month. The new cars flowed into the assembly lines without a single day's shutdown from 1947 model output—something but unprecedented in the industry. Packard officials believe September will be their best production period of the year.

• **Hudson Gets Set**—Hudson, while, is busy in what it hopes will be a quick shutdown for a model change of the utmost significance. Executives say it will be the most extensive in the firm's 38-year history. Within the next three weeks the company expects to open on production of a new line of cars built in completely retooled plants.

An investment of \$16-million has been made for retooling. Its fruit will be a car that stands only five feet from the ground to its top but provides as much headroom than any other mass-produced automobile today, and the most comfortable seats, Hudson claims.

• **One Piece**—This has been made possible by integrating the frame and chassis, as was done by Nash and Lincoln-Zephyr a few years ago.

Beyond that, the new Hudsons will



IN MOSCOW, TOO, THE STANDEES GET A BREAK

Transportation, with high billing in Russia's newest Five-Year Plan, gets a boost in Moscow with the appearance of a fleet of new buses. U. S. design influence is apparent: The 60-passenger ZIS-154's have all-metal bodies, diesel engines, electric transmissions—and windows for strap-hanging Moscovites to see through. They're produced in the Stalin Automobile Plant in Moscow.

powered by a completely new super-engine of high horsepower or by an improved super-eight unit.

Kaiser and Ford, Too—Kaiser-Frazer Corp. added to the new model interest coming out at midweek with a Kaiser Custom, a de luxe version of the Kaiser standard. The car was announced simultaneously with the production of the 100,000th unit produced by the company.

As for the big three—General Motors, Ford, Chrysler—none are expected to bring out new models until after Jan. 1, 1948. Ford technicians have been working for some time on a "completely new" model, scheduled to come out next year (BW—Jun. 14 '47, p. 42). But it looks as if it might not be in production before the second quarter of 1948. Whether it will then be called a 1948 or 1949 model Ford men haven't said (or probably even decided).

Postwar Expansion Plans Nearing Reality

The automobile industry's brave hopes for major expansion after the war (BW—Jun. 9 '45, p. 54) have been bedeviled by one impediment after another. Materials shortages, particularly steel, and often labor shortages have been the big snags.

The situation is finally beginning to clear up. This is indicated by the fact that production has just begun at the Buick-Olds-Pontiac plant at Wilmington, Del. Construction started two years

ago. Full production is not expected until the last of next year, however.

• **Largest**—Other parts of General Motors' expansion program, by far the largest in the industry, show similar lags between announced plans and actual finishing dates. The Chevrolet-Fisher assembly plant at Flint, Mich., was about three months behind schedule when operations finally started (BW—Jun. 28 '47, p. 25). This is true also of another Chevrolet-Fisher plant at Van Nuys, Calif., which is now about completed, and at a Fisher stamping plant at Hamilton, Ohio, where preliminary production is expected shortly.

G.M. realizes that even these schedules are subject to further delays.

• **Same Experience**—The picture is the same at Ford Motor Co. Ford has four plants under construction, with completion dates anywhere from two months to a year late. They include a Ford assembly plant at Atlanta, and Lincoln-Mercury assembly plants at Metuchen, N. J., St. Louis, and Los Angeles. The Los Angeles plant was first on the list of scheduled completions—projected for December, 1946. None of the four is yet finished; as of today the company hopes to complete them all by the end of this year.

Chrysler has planned the least expansion of any of the big three. Only major postwar project outside Detroit is a parts plant near Newark, Del. This is still a year away from completion.

• **Smaller Firms**—Other companies expanded existing facilities somewhat. Since their expansions were smaller, they are mostly finished today.



**You can make
STRUCTURALS**
TUBULAR SHAPES, MOULDINGS
AND TRIM

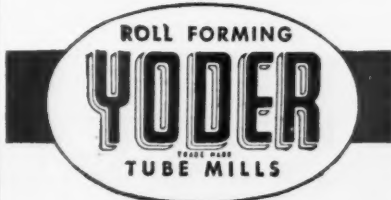
from the smallest up to 1/2" thick, from flat or coiled strips of metal up to 30" wide, and even wider, on a highly standardized Yoder Cold-Roll-Forming Machine. Any good mechanic can learn operation in a few weeks from a Yoder service engineer.

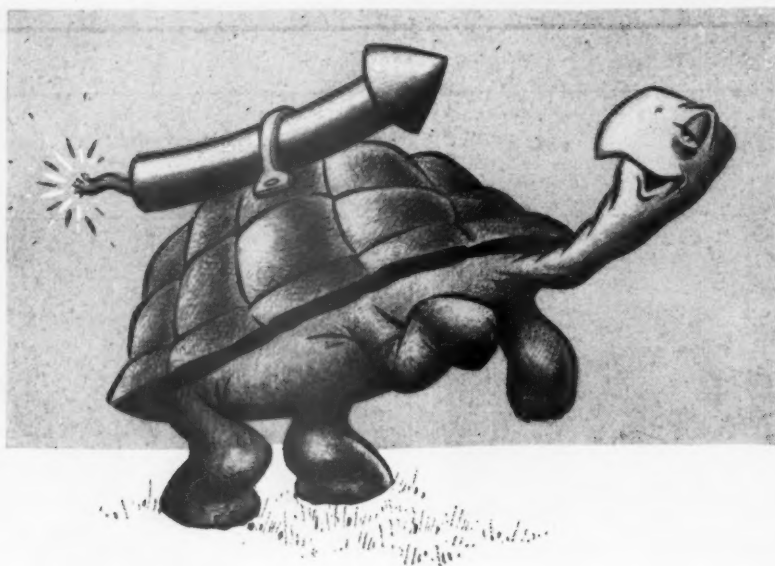
With normal production rate of 100 feet per minute, conversion cost ranges from one to three dollars per ton for medium heavy structurals.

On the same machine, you can make tubular shapes, mouldings, panels and trim, for every purpose, at a conversion cost rarely over 20 cents per 100 feet. Even on intermittent production of miscellaneous shapes, with relatively short runs and frequent roll changes, conversion cost remains exceedingly low due to special Yoder features facilitating quick roll changes and accurate adjustment.

Other Yoder machines for high speed slitting of strip and sheets, automatic cutting to length of finished shapes, curving, coiling, perforating, welding, embossing, etc., may be tied in with roll forming at little or no extra labor cost. Literature, Consultations, Estimates for the asking.

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5530 Walworth Avenue • Cleveland 2, Ohio



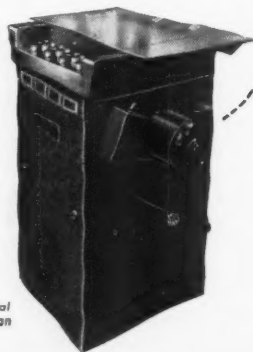


**full speed
in a split second!**

Quick-as-a-wink are the special motors R & M engineers developed for General Register Corporation's ticket-issuing machines. *One-half second* from "on" to "off" issues any number of tickets up to five, and also cuts the strip. *Ordinary* motors took too much time in getting up to speed.

Unusually high torque, both at starting and during acceleration through the first few hundred r.p.m., gives these motors practically *instantaneous* pickup. Special winding and an over-size condenser do the trick. General Register reports perfect operation even on extended tests of continuously repeated impulses at three-quarter second intervals—and that, *in use*, no servicing whatever is required over a period of years.

Long-time success in developing and building special motors has established the Robbins & Myers reputation for ingenuity and reliability. If you are a maker of motor-driven machines, it's experience that can help you, too.



The "Automaticket." Built by General Register Corporation. Powered by an R & M quick-pickup motor.

ROBBINS & MYERS, Inc.

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MOTORS • HOISTS • CRANES • MACHINE DRIVES • FANS • MOYNO PUMPS

Ford Settlement

Yardstick of \$90 a share by probate court would make the company's book value to more than \$300-million.

Book value of the Ford Motor Co. today is more than \$300-million—if yardstick used is the compromise between the heirs of Edsel Ford and Bureau of Internal Revenue.

The compromise has been in making since Edsel Ford's death in 1943. Its terms were revealed last week when a Michigan probate court authorized distribution of the company's stock held by Edsel Ford. The valuation set on the 1,153,509 nonvoting shares and the 59,411 voting shares in the Edsel Ford estate was \$109,189,800. This makes each share worth approximately \$90.

• **Stock Left by Founder**—On that basis, the 3,452,900 combined shares of the company (both participate equally in dividends) would have a valuation of \$310,761,000. Most of this sum is represented in stock left by Henry Ford, still in probate.

The total is equal to a boost in value of \$32 a share since the 1919 tax battle over Ford shares. At that time, the value set on stock transferred was equal to \$58 per share on the present stock outstanding. In terms of total capitalization, this increase equals \$110,491,800. The heirs had sought to continue the \$58 valuation. The government insisted for a time that the true worth was \$190 a share.

In the final probate of Henry Ford's estate, which will not take place until some years hence, there may be a new appraisal of the book value of the company.

• **Dominant Figures**—The Edsel Ford will and the present distribution of his estate stock do not alter the control over the company. Its destinies are still held tightly in the hands of the family's two widows, Mrs. Clara (Henry Ford) and Mrs. Eleanor (Edsel) Ford (BW-Apr. 26 '47, p. 92).

As matters now stand, the stock is held as follows (these figures vary somewhat from those which the company announced in April):

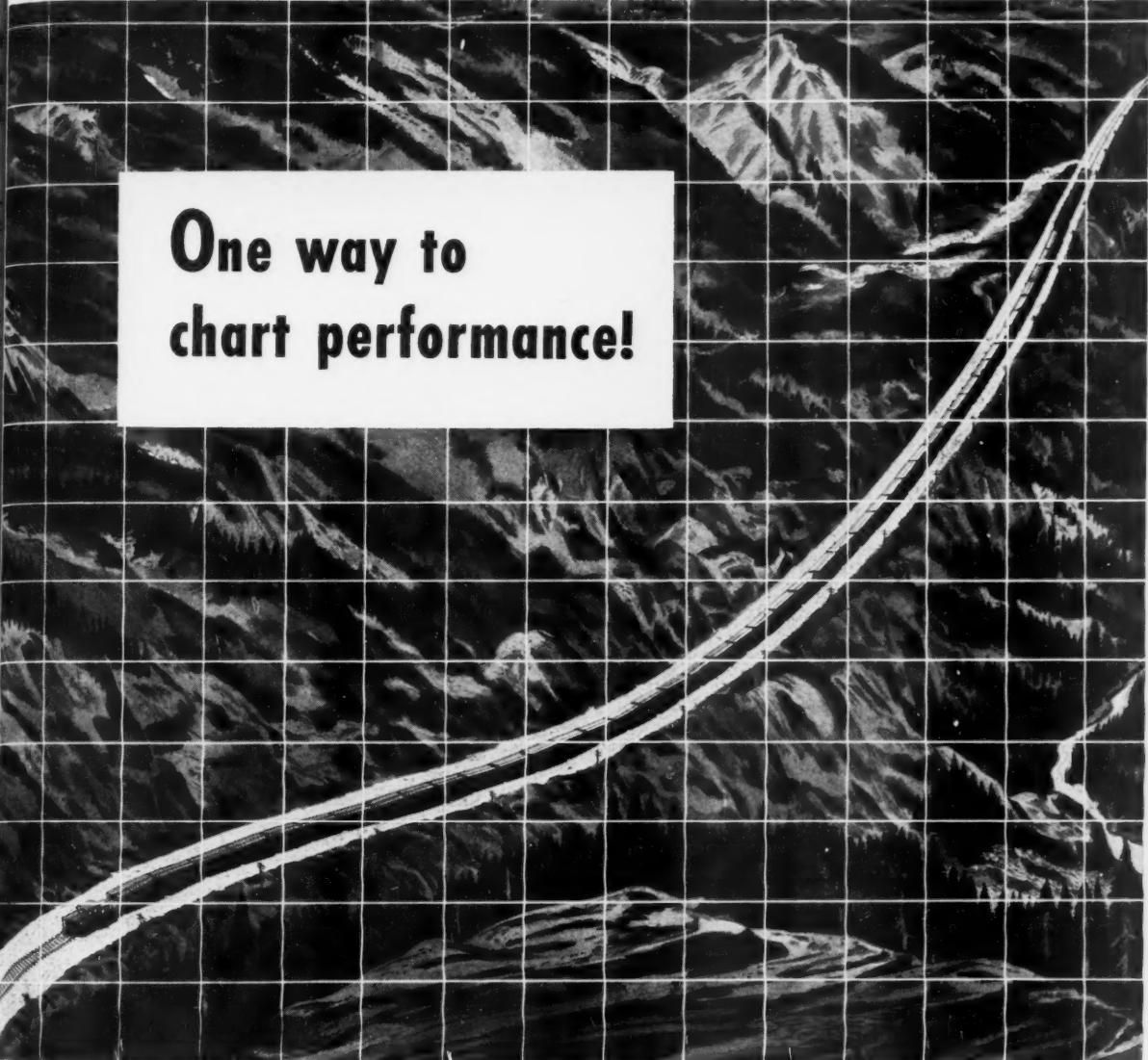
• Mrs. Clara Ford—3.5% of total voting stock held in her own name, plus approximately 56% (the total Henry Ford bequeathment) which she controls now as executrix of his estate. Total 59.5%.

• Mrs. Eleanor Ford—approximately 20% of total voting stock, which she votes as trustee for two of her children now under 25 years of age.

• Henry Ford II—approximately 10%

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WHAT EVERY BUSINESSMAN SHOULD KNOW ABOUT HIS PARTNER—THE RAILROADS



One way to chart performance!

American industry and American farmers are turning in a magnificent performance—the kind you chart with a climbing curve!

The performance record of the railroads can be charted the same way.

For your railroads are hauling freight at the rate of more than a million tons a mile every minute: raw materials... finished products... and farm produce in staggering quantities.

In fact, American railroads are hauling more tons more miles than ever before in peacetime!

And they are hauling this biggest peacetime traffic in history with fewer cars than they had on V-J Day.

Railroads have not been able to get new freight cars fast enough to replace those worn out in wartime service. About 90,000 new cars have been delivered and put to work. But they have not come as fast as they were needed. More than 110,000 additional cars are on order.

Railroads are currently furnishing about 90% of the cars shippers want—when they are wanted. And they will

keep on doing their level best to speed the day when they can furnish all the cars that shippers need—on the day they are needed. *Association of American Railroads, Washington 6, D. C.*

To maintain this finest transportation in the world...

... the railroads must earn an adequate income.

Over the last 25 years—and that includes the war years—the railroads have earned an average of only 3⅓% on their net investment.

Most people think 6% would be no more than fair.

And 6% is the minimum return the railroads need to continue to provide the kind of transportation you want.

American Railroads

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NO. 710

This steel chair suite will bring you complete satisfaction. The Presidents offer deep-seated comfort, distinctive beauty, and flawless performance. Harter quality gives you more value for your money.

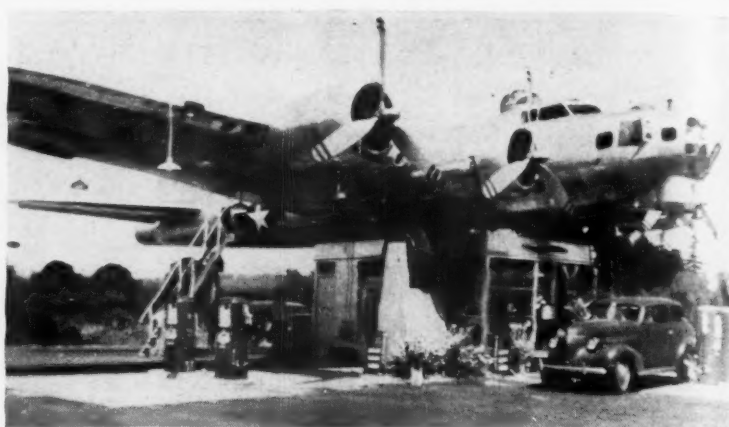
The Presidents are cushioned with U. S. Koylon Foam. This soft, thick foam rubber will not sag or pack down, always stays buoyant and resilient. The cushions keep cool and clean because of their completely porous construction.

Richly upholstered in Goodall Gros Point Fabric, attractive and durable. Choice of green, maroon, or brown upholstery. Baked enamel finish in gray, green, or brown; also grained walnut or grained mahogany.

Your Harter dealer will be pleased to show you the Presidents. Write for his name and address. Harter Corporation, 209 Prairie Ave., Sturgis, Michigan.



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STURGIS, MICHIGAN
STEEL CHAIRS • POSTURE CHAIRS



NEW FIELDS TO CONQUER FOR A BOMBER

This B-17 bomber, home to roost on top of a gas station, is conspicuous evidence that competition is keen among auto service men. The ex-warcraft is doing yeoman's service for proprietor Art Lacey, at his Milwaukie (Ore.) place. Passing motorists stop, pile in and climb the ramps to see what the big surplus craft is like inside—and buy gas. When he has earned back the cost, Lacey intends to offer it to the state.

of total voting stock, obtained in this month's distribution.

• **Benson Ford**—another 10%.

• **Grandchildren**—Ultimately, today's matriarchy will pass to the four grandchildren of Henry Ford. When they all come of age, each will hold 10% of the total left them by their father, Edsel Ford, plus about 14% each left by their grandfather, Henry Ford. Presumably, they will also inherit proportions of Mrs. Clara Ford's 3.5%.

Nonvoting stock, representing 95% of the total company shares of the two classes, goes from both estates to the Ford Foundation. This softens inheritance tax problems.

• **Total**—The authorized distribution of the Edsel Ford estate totaled \$131,548,434. This amount included \$109,189,800 in stock left to the children, and personal property of \$11,030,829 left to Mrs. Eleanor Ford. The total estate is estimated at nearly \$200-million. The estate has already paid some \$27-million in inheritance taxes.

Steel Shortage Causing Shifts to Aluminum

Because of the scarcity of sheet steel, aluminum is finally getting its foot in the automobile manufacturing door. Here and there, companies are turning to aluminum for use in small sheet-metal parts.

• **Costs More**—In practically all cases the cost of the aluminum is higher than that of steel—even though the weight for identically sized parts is, of course, considerably lower. However, automo-

bile companies have another factor to consider. If they can get by with a few less pounds of steel per car, they will be able in the aggregate to build a few more cars. Thus, over-all savings—or at least an even break—may be possible.

Ford has made more shifts from steel to aluminum than any other company. Running boards and headlamp shells are now made of the lighter metal (BW-Sep. 20 '47, p. 40).

Kaiser-Frazer is planning an early shift to aluminum gas tanks. In place of light gage steel, K-F. will use a new, general-purpose sheet aluminum developed by Henry Kaiser's Permanente Metals Corp. (BW-Aug. 16 '47, p. 19). New 21-gal. tanks will weigh 7 lb. against the 22-lb. weight of the present steel tanks. The aggregate saving of steel—typical of others of the sort—comes to about 9 tons a day on a production run of 900 cars.

Packard, in its 1948 models (page 28), is using aluminum instead of steel for its heater manifolds. The desire to save steel, a serious problem at Packard for many months, is the only reason here: Aluminum in this application costs definitely more.

Chevrolet is using aluminum in casting for the end frame of its starting motor.

• **Reaction**—Aluminum men are highly pleased over these shifts. They hope that force of habit and greater familiarity with their product will bring the auto companies to make further transitions. But the steelmakers aren't worried. They assert that, as soon as they are able to fill all demands, they will recapture the markets they have surrendered.

INTERESTS WOMEN?

practically everything . . . and so almost as many women

men are reading **TIME!**

EVERY WEEK 1,500,000 women read **TIME!**

Why does **TIME** interest so many women so much?

Because week after week **TIME** articles—like those from one recent issue shown at left—satisfy an intelligent woman's natural curiosity about the world around her . . . and appeal to her personal interest in how the world affects her home, her family, and herself.

How intensely do these women read **TIME**? Like the **TIME**-reading men, most are cover-to-cover readers.

TIME has 1,800,000 men-readers and 1,500,000 women-readers. A study among equal numbers of **TIME**-reading men and women reveals the intensity of **TIME**'s readership, department by department, by sexes. The table below is based upon 2400 personal interviews:

ART	99 Women
BOOKS	115 Women
BUSINESS	68 Women
CANADA	76 Women
CINEMA	121 Women
EDUCATION	96 Women
FOREIGN NEWS	81 Women
INTERNATIONAL	82 Women
LATIN AMERICA	75 Women
LETTERS	97 Women
MEDICINE	102 Women
MILESTONES	107 Women
MISCELLANY	101 Women
MUSIC	107 Women
NATIONAL AFFAIRS	86 Women
PEOPLE	102 Women
PRESS	81 Women
RADIO	85 Women
RELIGION	104 Women
SCIENCE	74 Women
SPORT	52 Women
THEATRE	118 Women

For
100
men

Most of **TIME**'s one and a half million feminine readers are wives or daughters of the men who read **TIME**. They are among America's most alert and active women. In a week they do more planning and discussing and managing, in the home and out—more buying and consuming and recommending—than most women do in a month.

When you can get their interest, you've got something. And the best place to get it is in **TIME!**

every week by the men and women who are everybody's **Best Customers!**

RETRENCHMENT

is never easy

... why invite it?

As long as the orders are coming in . . . as long as the back-orders accumulate, there is always the urge to add to production facilities and increase volume.

We have never subscribed to that school of business conservatives that is content to take the sales the plant can handle and let additional opportunity go by the boards.

Nor are we inclined to the "venture-all" attitude that casts all caution to the wind.

There is a safe middle road

Why not "have your cake and eat it too?" Take all the volume you can get—and increase your production capacity without investing a dime in plant and machinery. Use the other fellow's plant and machinery . . . add his capacity to yours.

If the business current ebbs, there's no costly and distasteful retrenchment—no idle capacity to rue.

And it's a safe road, IF...

Pick your contractor with the same care you'd exercise in deciding on new facilities of your own (for in a sense his facilities will become yours). Pick him with the same care you would use in selecting a works manager (for in a sense he is going to manage a part of your production).

Experience and performance are all important. Here at Lewyt we've been at it for almost sixty years, dovetailing our production with the other fellow's assembly line. If the operation fits our facilities, it may pay you to "Let Lewyt Do It."

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Write on your business stationery for our illustrated brochure describing the Lewyt organization. Lewyt Corporation, Contract Manufacturing Division, 66 Broadway, Brooklyn 11, N. Y.

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MECHANICAL ASSEMBLIES, COMPONENT PARTS, SUB-ASSEMBLIES
AND METAL PRODUCTS TO THE MOST EXACTING REQUIREMENTS

Used Car Dealers See Continued High Prices

Prices of used cars will stay high for at least two years. They may even go higher.

That is the general sentiment of national Used-Car Dealers Assn. members expressed at their first annual convention in St. Louis last week.

• **Not Happy**—The forecast of continued high prices brought no cheers from the dealers, however. They say the don't like the high prices any better than the public does. They would prefer to have cars selling at \$700 instead of \$1,400—they can make more money by turning over a greater number of cars at the lower prices.

Charles Hilliard of Fort Worth, Tex., outgoing association president had this to say: "I not only doubt that automobiles ever will be cheap again but I believe that in another five years they will be higher-priced than they are now."

• **Controls?**—There was more talk about prices than anything else at the meeting. It was the No. 1 worry of the 300 delegates. Some dealers said they feared state or federal governments might step in with price-control legislation unless dealers do something about price themselves. No one suggested any tangible way of controlling prices, however.

Elimination of such practices as overcharges on instalment financing and sales of defective merchandise will be sought in the coming year. Oliver W. Wood of Newark, N. J., the new president, said his administration will tackle that job. But all he has to go on so far is a convention-adopted resolution that has pledged a thorough safety inspection of all used cars before they are sold.

TRAFFIC SOLUTION

Boston is joining the ranks of cities setting up truck terminals on their outskirts to ease traffic congestion. A group of the city's businessmen have formed a new corporation for the purpose of building a \$10-million wholesale meat terminal in nearby Charlestown. The new terminal would divert traffic away from historic old Faneuil Hall market, keep heavy trucks off crowded, narrow Boston streets.

At least 10 large meat companies have agreed to put up capital toward erection of the market. Heading up the corporation is Sidney H. Rabinovitch, president of the Old Colony Provision Co. To get the meat products from Charlestown into the heart of Boston, a small-truck feeder system may also be set up.

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BIRTHPLACE of a new alloy process: M. W. Kellogg's Jersey City works

Versatile Plant Makes Alloys

M. W. Kellogg Co. of Jersey City develops new method of making specialized alloy steels to withstand high temperatures. Uniform high quality at no increase in cost is claimed.

A new process for making specialized alloy steels—such as those required for high-temperature operation in gas turbines—was announced this week by the M. W. Kellogg Co., engineering firm.

Reticence—Since it intends to manufacture the specialized alloys itself, Kellogg was decidedly close-mouthed about the process and its operation. The company went little further than describing it as an "electric ingot method for continuous metal casting; alloying elements are continuously fed at a controlled rate into an electrical apparatus from which it is excluded, and in which an ingot of any desired analysis is produced by progressive solidification."

Superior—But the company was much less reticent about the results it said are produced:

(1) Alloys are of superior uniformity to both chemical analysis and physical properties. This is because alloying elements are metered with extreme accuracy, and because ingots are "progressively solidified" in the same container in which the raw materials are melted.

(2) Ingots are "substantially free" from defects of the type often found in alloys formed by conventional means. Eliminated are such defects as major

central cavities in ingots and segregated carbides within the metal.

(3) Extreme ductility is obtained. This property enables the alloy to "stretch" rather than fail when used in such high-speed, high-temperature devices as a gas-turbine wheel.

(4) Kellogg claims alloys made by its process will cost just about the same as alloys of the same chemical analysis made by other methods.

• **Uses**—Kellogg engineers see three major fields of application for its process: in high temperature work, such as gas turbines and turbo-jet aircraft engines; in high-speed tools (wartime experience showed that, when this process was used, tools made from cast metals functioned as well as forged tools); and in stainless-steel alloys that require machining (Kellogg alloys are said to show less tendency to work-harden as they are machined).

The engineering firm already has one production machine working at top capacity at its Jersey City (N. J.) plant. A multiple ingot-producing unit now is being built, will be in operation early in 1948.

• **Milestone**—To persons familiar with Kellogg and its operations, the decision to manufacture and market these alloys stands as a major milestone in the com-

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job that's
hard to
FINISH?



A manufacturer of fine briar pipes wanted a lacquer that would enhance rich wood grains and still withstand terrific heat...



An outstanding airline wanted a safer, more economical, durable finish for fabric control surfaces...



Makers of sound recordings wanted a record coating that would resist needle wear without affecting tone fidelity...

They all got what they wanted from Monsanto—specialists in answering unusual industrial coatings problems.

In working with industrial technicians, Monsanto chemists have evolved literally thousands of unique formulas for a wide variety of coatings applications. You can draw on the benefits of this experience and its proved results for your own difficult or "different" coating problem. Simply address: MONSANTO CHEMICAL COMPANY, Merrimac Division, Desk 6R, Boston 49, Mass.



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pany's history. Fabrication of everything from metal tanks to industrial chimneys has long been an integral part of Kellogg's business; but it has been subordinated in recent years to an ever-widening range of chemical- and petroleum-engineering activities. Now increased emphasis is being placed on its fabrication work.

Best known for its work in the petroleum field, Kellogg has designed and built refineries for most of the major oil companies. Its operations in this field have extended from Texas to Canada, from Venezuela to the Middle East.

Turning its petroleum refining "know-how" into other channels, the company recently announced its Solvent process for refining and separating animal, vegetable, and marine oils (BW Nov. 23 '46, p48).

Expansion in recent years has brought it into numerous other fields. During World War II, for instance, it organized a subsidiary, Kellogg Corp., which engineered and built the biggest of uranium-235 processing plants at Oak Ridge, Tenn.

• **Beginnings**—All this is a far cry from the job that the company was incorporated to do 42 years ago. Major operations then were the fabrication of various types of piping, and the construction of chimneys and stacks. The latter work still constitutes a fairly important part of the company's operations; and it has led to extensive developmental work in refractories, ceramics, and paints.

First factory site was in Newark, N. J. But in 1906, a year after incorporation, Kellogg moved to its present home, Jersey City. It was in 1912 that the company first began attracting the attention of the petroleum-refining industry. At that time the newest item of oil-refining equipment was the Burton still; this was a large cylindrical vessel made by riveting steel plate. Difficulty was that the seams buckled when the



VETERAN AND VERSATILE: R. Austin, president of Kellogg.



Planning a new Plant?

Our industrial department can save you time and money

If you are planning to expand your business in the West, Texas or Louisiana, we invite you to make use of Southern Pacific's industrial service.

As the pioneer railroad in the eight states we serve, we can furnish you accurate, up-to-date information on all matters which might affect your choice of a site—such as water supply, power, transportation, labor, taxes, fuel, property availability and costs. We can, moreover, obtain this information without revealing your plans or identity.

If you will provide us with your basic requirements, we will be glad to furnish you complete details on suitable sites which are available. Then, if you wish, our representatives will accompany yours on an inspection trip of the locations which you are interested.

For many years industries large enough to require spur track installations have been locating along Southern Pa-

cific Lines at the rate of more than one a day. Our people have been of help to many of them. Executives of these companies will tell you that we can be trusted with the most confidential plans.

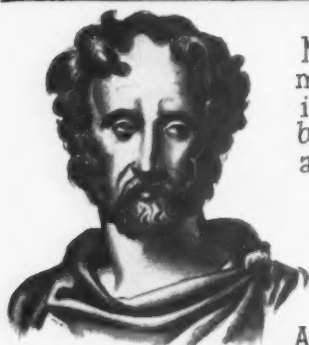
Our business is transportation, not real estate. We are more concerned with the success of your business than we are with its specific location. You may be sure, therefore, that any recommendation we make to you will be unprejudiced.

Please do not hesitate to write me. Your inquiry will receive careful attention and will be treated with strictest confidence.

W. W. HALE, *Vice-President, System Freight Traffic*
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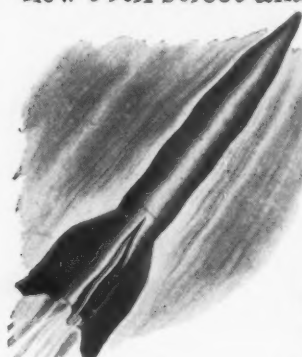
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Asbestos...as priceless as jewels



Nearly 2000 years ago, Pliny the Elder mistakenly thought that *asbestos* grew in the desert and became "habituated by the sun to resist fire!" He valued it as highly as precious jewels.

An *asbestos* deposit was found right in the middle of New York City! Geologists discovered it in 1810, at what is now 59th Street and 10th Avenue.



To resist the cold of the stratosphere and frictional heat in its earthward plunge, the German V-2 rocket contained *asbestos* insulation around its mixture lines!

During a heavy gale, the S. S. Western Star sank to the bottom. When she was raised 3 years later, her K&M pipe insulation was still in good serviceable condition!



Think of it! Three years in Davy Jones' locker... yet ready for use again when the ship was salvaged! That's a sure-enough case of durability—the kind of durability you can expect from K&M "Featherweight" 85% Magnesia pipe insulation.

Of course, you get more than just durability from "Featherweight." First, last and all the time, you can count on its high *insulating efficiency*. This combination of asbestos and magnesia is still one of the best industrial insulating materials ever discovered, for temperatures up to 600°F.

"Featherweight" 85% Magnesia is fire-proof, extremely light in weight, and mechanically strong enough to withstand all ordinary service conditions. Expert K&M Application Contractors, located strategically throughout the country, stand ready to serve your needs. Why not turn your insulation problems over to K&M?

Nature made Asbestos...

Keasbey & Mattison has made it serve mankind since 1873



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was heated to operating temperature.
• **Weld Method**—M. W. Kellogg, company president, had observed a German method of hammer-welding while on a trip to Europe; he decided to substitute this weld for the rivets in an effort to make the stills leakproof. German machinery and German operators were imported. But it was found the machinery was too light for the heavy plates used in the stills. No equipment had to be designed and built here. The German operators were called home at the outbreak of World War I, so American operators had to be trained.
To top off the troubles, the first five stills built failed to stand up under operating conditions. But the sixth met all tests; and in the next few years the company made thousands of them, from almost every refiner in the country.

• **Prestige**—Even more important than the business obtained was the standing this development gave Kellogg in the petroleum industry. Further expansion here, however, was put off because America's entry into World War I. Fully 90% of the company's capacity was turned over to war work: facilities used at Muscle Shoals in the manufacture of ammonia; piping for the compressed-air riveting system at the famous Hog Island shipyards; fire and engine room piping for ships.

Returning to petroleum work in 1918, Kellogg obtained the licensing rights to the Fleming process—a new method for cracking crude oil to increase the yield of gasoline. A few years later Kellogg became exclusive sales agent for still newer refining method—the Cro process.

• **Research**—Kellogg recognized that petroleum processing was becoming complicated that important developments could no longer be expected from individuals. So in 1927 it set up a petroleum laboratory. At the same time a metallurgical lab was established; for physical, structural, and chemical properties of metals and methods of handling metals were becoming increasingly important factors in petroleum-refining design and construction.

In the years that followed, Kellogg played an important role in developing and engineering the new techniques for getting the ultimate in yield—and dollar value—out of crude oil.

• **War Work**—When the petroleum industry was called upon to expand its capacity to meet World War II demands for gasoline, nearly all the expansion was represented by the new fluid catalytic cracking process. More flexible than the older thermal cracking system, the fluid process also resulted in higher quality products. Kellogg engineers designed and built more than two-thirds of these new plants—all that the company found it physically possible to handle.

Meanwhile, developments had been

on in other lines. Kellogg intro-
alloy-clad steels for use where
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Pluramelt. It announced heat-
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Command Performance—Late in
Kellogg executives were sum-
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abilities to building one of the
plants at Oak Ridge to turn out
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Kellex Corp.
sides its major contribution to the
atomic bomb project, Kellex opened
way to another major expansion in



TIMBER SPY

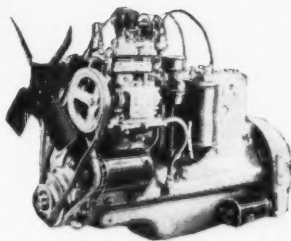
Saw logs from the "Marne
Forest" at Ft. Lewis, Wash., are
for a thorough electronic frisk-
ing. A metal detector developed
by General Electric Co. will be
in the job to spot unexploded
shells and metal fragments in
some 12-million ft. of timber be-
ing cleared from the woods.
It all started when unexploded
7-mm. shells were found em-
bedded in the timber during clear-
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Engineers. Origin of the shells
still a mystery, but indications
are that they were fired from air-
craft some 10 to 12 years ago.
G.E.'s detector will operate un-
der water, check on logs—as they
pass through a 60-in. electronic
oil opening. The device scans
nearly 20,000 ft. of timber a day,
spots metal fragments as small as
1/8 in. in diameter.

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THE RED SEAL 5-6427 delivers
up to 110 net h.p. for heavy
duty truck and bus operation.
It is a 6-cylinder model incor-
porating many advanced fea-
tures of engineering and de-
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More and more trucks and buses, over a
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broad transportation line includes more
than 30 models. There are units available
for use on gasoline or butane, as well as
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tal "cushioned power." Thus the engine can
be chosen for a specific application to pro-
vide high performance at lowest operating
and maintenance cost.

Continental is building **more** Red Seal
engines, for **more** jobs—and **more** are
on the way.

Continental Motors Corporation
MUSKEGON, MICHIGAN


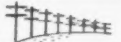

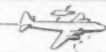

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FOR THE FARM FOR AVIATION FOR THE OIL FIELD FOR INDUSTRY

OIL
does not wear out
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why throw it away

**LEADERS IN
AMERICAN INDUSTRIES
RE-REFINE**

RAILROADS	
PUBLIC UTILITIES	
FLEET OPERATORS	
AIR TRANSPORTATION	
INDUSTRIAL PLANTS	

Re-refining with Retrol* fully restores used oils (often discarded) to excellent quality in one complete, economical process. This fact has been proven by engineers in leading industries and in transportation companies, wherever oils are used.

WHAT IS RETROL?

Retrol is a highly activated adsorbent manufactured specifically for the re-refining, decolorizing, purifying and filtering of used oils.

Re-refining with Retrol does the entire money-saving job—using proven petroleum refinery principles—distillation, adsorption and filtration.

Send for free booklet—"American Industry Speaks."

re-refine with
RETROL

*Reg. U.S. Pat. Off.

FILTROL CORPORATION
634 South Spring Street
Los Angeles 14, California

Please send me your book entitled "American Industry Speaks."

Company _____
Name of Individual _____ Title _____
Address _____
City _____ Zone _____ State _____



PICKUPS BY THE CARLOAD FOR HEAVY JOBS

A "Skyline Giant" backs its claim to being the world's largest fork and ram truck by hoisting a 45,000-lb. boxcar. The demonstration was part of a series of gymnastics that were staged by Automatic Transportation Co., Chicago, when it introduced its new line of heavy-duty industrial trucks. Capacities of the big four-wheel-drive units run from 10 to 30 tons. Automatic says that they are the first such trucks to be equipped with high-pressure hydraulic lift.

the scope of Kellogg's activities: With the end of the work at Oak Ridge, it was decided to maintain an interest in this new field of atomic energy, and in allied fields.

• **New Owner**—In December, 1944, ownership of the Kellogg Co. was acquired by Pullman, Inc. (BW-Dec.30 '44,p50). This provides Kellogg with the financial support it needed for continued expansion in new lines. Now that Pullman, Inc., has sold its Pullman-car operating company to the railroads (BW-Apr.5'47,p6), Kellogg is one of its two major subsidiaries (the other is Pullman-Standard Car Mfg. Co.). The importance of Kellogg to Pullman is indicated by the fact that Kellogg's mid-1947 backlog of orders exceeded \$100-million.

In 1946, M. W. Kellogg retired as president and active head of the company he organized. He continued as chairman of the board. His successor as president was Harold R. Austin, a veteran of more than 35 years with the company.

Executive vice-president since 1940, Austin personally directed the organization of Kellogg, had a large hand in other wartime activities. Back of that are years in which he, as general manager and in other executive posts, directed or played an important part in the growth of the company from a pipe-fabricating shop to one of the country's leading chemical- and petroleum-engineering firms.

Photos in Glass

Corning develops light-sensitive sheets on which pictures can be made from an ordinary negative. Other uses seen, too.

Printing photographs directly in glass will soon be a commercial reality.

Researchers in ceramic techniques have known for some time that ancient glassware, found in desert countries, showed evidence of color change. They reasoned that both glass composition and exposure to light were factors in the extent of coloration.

• **New Composition**—Now technicians at Corning Glass Works, Corning, N. Y., have perfected, on an experimental basis, glass which takes on color when exposed to ultra-violet rays. The color can be "fixed" by heat-treatment. The new glass is simply a composition in which the sensitivity to light is increased.

There are several types of the light-sensitive glass. One type has a color range from purple, blue, ruby to orange. Another will develop a brilliant red. A third type produces yellows and browns. Only a single color can be obtained from each sheet.

• **Picture-Making**—To print a picture in the glass, a conventional photographic negative is placed between the glass

ect and a source of ultra-violet rays, the same manner that a contact print made. Irradiation produces a positive colored print, the depth of tint depending on exposure time and other factors. Darkroom is not required.

The color is fixed in the glass by heating the sheet in a furnace at 1,000 F-1,500 F for about a half-hour. Then the glass is no longer light-sensitive.

Color can be produced in glass sheets up to 2 in. thick. With thick sheets, "solid" or dimensional effect is obtained in the finished "print."

Other Uses—The glass is still in the laboratory stage; no cost estimates have been released. Researchers see a big future in various nonphotographic uses: expensive stained glass; new decorative techniques for glassware and containers; colored or opal glass for office partitioning; lighting fixtures.

It is expected that the new glass will be available on a licensing basis, upon completion of experimentation.

IMPROVED ELECTRONIC TUBE

A foot-long electronic tube developed by Stanford University scientists simultaneously amplify 250,000 telephone conversations or 300 black-and-white television broadcasts.

Called by the technicians a "travel-wave tube," the device provides a means of lengthy exposure of microwaves to a stream of electrons. The tube contains a coil of wire along which the microwaves travel. A beam of electrons is shot past the coil from a cathode. The electrons impart part of their energy to the microwaves to build up the waves.

According to Dr. Lester M. Field of the Stanford staff, the new tube enables the ability of earlier models of the same type to cover a wide range of frequencies and handle a huge volume of radio traffic.

Research on the tube is a continuation of the work begun by Field and John R. Pierce at the Bell Telephone Laboratories.

PLASTIC PARTS

After two years of experimental work in plastics-production machinery, Nash-Kelvinator Corp. has formed a Plastics Division. The company is particularly interested in the better insulating properties of plastics for refrigerators and other appliances. But it isn't overlooking the eye-appeal, color stability, and other characteristics of plastics.

Ready for the new division is a recently converted plant in Milwaukee, one of the largest and most modern injection-molding machines has been installed, and a few large plastic parts for Kelvinator refrigerators already in production.

H-P-M PRESSES GO KITCHENEERING



Typical of installations is the H-P-M Metal Working Press at the Buckeye Aluminum Company, Wooster, Ohio.

Top-speed cooking utensil production from ALL types of metal . . .

Revere, Ecko, Hot Point, Buckeye . . . such famous names as these know the value of H-P-M Fastraverse Presses for fast, precision cooking ware manufacture. And they know that H-P-M Presses play no favorites for high-speed production for *any* metal—aluminum, steel for enamelware or stainless steel. That's why you'll find so many H-P-M installations in operation today—not only for making cooking utensils—but for *every* metal working job. Faster operation—less scrap—deep draw in a single operation—these advantages make H-P-M Presses "stand-outs" in the metal working field.

To Solve Your Pressing Problem—Versatile design of H-P-M Presses makes them adaptable to the exact spot in your production line where they can do the job you want—equipped with hydraulic blankholder and die cushion—high-speed performance for both shallow and deep sheet metal draw work. And there's only one company to look to for responsibility for press performance. H-P-M designs and builds all hydraulic units in each press . . . pumps, valves, controls.

No matter what your metal working problem—or what type of metal you're using—there's an H-P-M Press to do the job—better and at low cost. Our engineers can recommend the right press for your metal working job.

THE HYDRAULIC PRESS MFG. COMPANY

1000 Marion Rd., Mt. Gilead, Ohio, U. S. A.

Branch Offices in New York, Philadelphia, Pittsburgh, Cincinnati, Cleveland, Columbus, O., Detroit, and Chicago. Representatives in other principal cities. Export Dept: 500 Fifth Avenue, New York, N. Y. Cable—"Hydraulic".



Write today for your copy of Bulletin 4206. Fully describes H-P-M Metal Working Presses and tells how they can help speed your production.

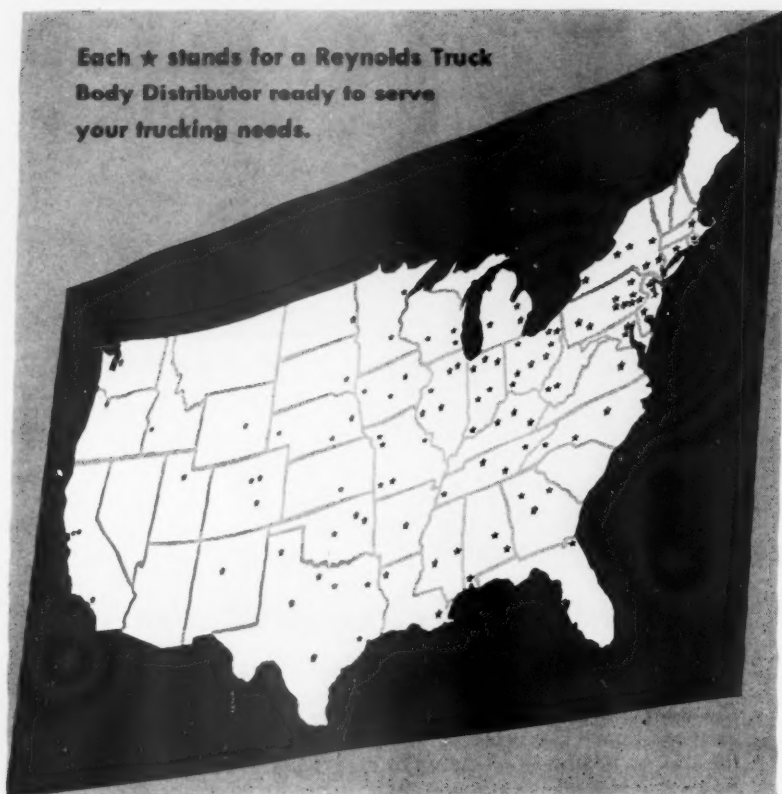


All-Hydraulic
Self-Contained

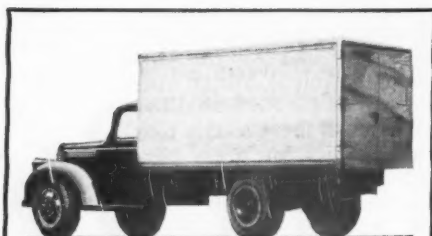
Metal Working Presses

REVOLUTIONIZING PRODUCTION WITH HYDRAULICS SINCE 1877

Each ★ stands for a Reynolds Truck Body Distributor ready to serve your trucking needs.



NATION-WIDE DISTRIBUTION MEANS PROMPT LOCAL SERVICE



REYNOLDS TRUCK BODY—STRAIGHT SIDE
Your choice of 3 widths, 2 heights, 7 lengths, 15 back-door combinations, 8 interior linings . . . over 10,000 possible combinations. All available in standard parts.

Just two proved examples of how Reynolds Aluminum Van-Type Truck Bodies are saving time and money for truck and fleet owners all over the country. Aluminum is only $\frac{1}{3}$ the weight of steel . . . makes possible outstanding operating economies.

Write us for the name of your nearest distributor. A few territories are still open. Inquiries are welcome. Reynolds Metals Co., Truck & Trailer Division, 2000 South Ninth Street, Louisville 1, Kentucky.



REYNOLDS ALUMINUM TRUCK BODIES

Reynolds Aluminum Truck Bodies increase payload . . . cut repair time and cost.

"Reynolds Truck Body completely repaired in just $2\frac{1}{2}$ hours," writes the Parkway Distributing Co. of Louisville, Kentucky.

"The difference in payload carried by the Reynolds Truck Body means \$15 more profit per trip," writes the E. M. Holmes Transportation Co. of Buffalo, N. Y.

NEW PRODUCTS



Streamlined Gas Can

Gasoline cans are getting a better treatment. For the sportsman, Alvin Smith Co., 161 W. Wisconsin Ave., Milwaukee 3, has designed Phil-Rust-resistant container that looks much like a small overnight bag. Easy to store and carried, the can simplifies the servicing of outboards and small work engines.

Filling is done through a flexible Neoprene hose attached at the base of the can. When the hose is released, it folds automatically in a storage position flat against the surface. Sealing the can with a locking cap prevents the danger of fire from leakage. The can's capacity is $2\frac{1}{2}$ gal.

Availability: late November.

Rolling Stone

Robo, a knife sharpener, is aimed at helping the home cutlery expert improve his grinding record. The device consists of two plastic wheels with a small grindstone mounted in the center. In sharpening, the knife is placed against the inner sloping face of either wheel with the cutting edge against the grindstone. The correct grinding angle is automatically determined.

Rolling the wheels back and forth with a push-pull motion on the handle rotates the grindstone along the cutting surface of the knife. Alvin Speare's Sons Co., 136 Sixth St., Cambridge, Mass., who makes the sharpener, says it produces a uniformly keen edge in 30 sec.

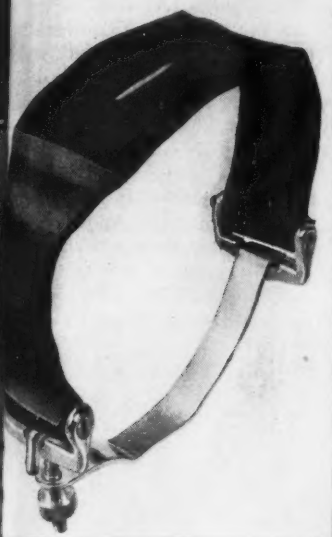
Availability: immediate in limited quantities.

Spark-Plug Cleaner

Garage operators and truck fleet owners are promised easier spark-plug cleaning with a new machine developed by Auburn Spark Plug Co., Inc., Auburn, N. Y. Selling point: The cleaner is

UCTS by a foot valve; hence the oper-
has both hands free for handling
ings.
ber adaptors automatically posi-
plugs for rapid and efficient clean-
The machine has a built-in work
a protective eye shield, cloth filter
that eliminates flying dust particles.
erates on the usual service station
pressure, requires no special installa-

availability: immediate.



Rubber Tire-Chains

imed at making winter motoring a
narrowing experience, Gripco rub-
ber chains will reportedly eliminate
the rattle, car vibration, and link
age. Because they ride and wear
the tire, the chains may be left on
throughout the winter without their
interfering with the smooth operation
of the car.

The chain actually consists of six
plotted rubber straps. These are
in place by self-centering steel
one on either side of the wheel.
Attachments are easy; bolt hooks and
do the attaching.

On muddy roads, there are Gripco
adaptors. The mud hooks are similar
to the chains in design features, but they
attach singly to the wheel.
Safety Grip, Inc., 1251 Electric
Ave., Lackawanna, N. Y., is the manu-
facturer.

availability: immediate.

Electronic Watchmen

no electronic devices, one for traf-
fic control, the other for quality con-
trol in the production line, have been
developed by General Electric Co.,
Schenectady 5, N. Y.

The long-range photoelectric relay is
designed to count the number of vehicles

What's Your Bulk Material HANDLING PROBLEM?

SAND?
CINDERS?
CHEMICALS?
FERTILIZER?
DRIED FRUIT?
CLAY?
COAL?
PEANUTS?
SALT?
ORE?



HOUGH
SAY HUFF
Payloaders

*Travel Anywhere!
Handle Anything!*

A Hough Payloader operates anywhere — inside of box cars, in ship's holds, through narrow doorways, down congested aisles, in your plant or in your yard, the year 'round. It loads, carries, and dumps any bulk material; can be used for yard maintenance and snow removal. Whatever your job may be there is a proper size Payloader to meet your requirements.

Thousands of plants throughout the world are standardizing on Hough Payloaders for all their bulk handling. A speedy, one man operated Payloader will pay for itself in no time, in man-hours saved, in increased production, in lower production costs all along the line.

SEND for new literature today on the 10½ cu. ft. capacity Model HA; the ¾ yard Model HF or the 1 yard Model HL.



THE FRANK G. HOUGH CO.

MATERIAL HANDLING EQUIPMENT SINCE 1920

700 Sunnyside Ave.

Libertyville, Ill.

When the boss of the payroll dept. got kissed!

It was just a week after he had a Todd Payroll System installed. Now his secretary was getting home on time and everything in the office was running smoother because the Todd Payroll System had eliminated MORE THAN FIFTY PERCENT OF THE TIME SPENT IN PAYROLL PREPARATION! No wonder she kissed him.

Todd Payroll Systems not only save payroll preparation time—they also keep all the facts for Government Agencies on hand and ready for immediate inspection. With a Todd Payroll System any clerk can prepare the statement of earnings,

the payroll sheet, and the individual earnings record ALL AT ONCE! Why not see if a Todd System would help you? Just mail us the coupon and we'll send you complete information. No obligation, of course.

CUSTOMER'S COMMENT:

"Since installing your payroll system we have been able substantially to reduce man-hours in our payroll operations and have completely eliminated overtime. We are sincere in recommending a thorough investigation of your payroll system to anyone confronted with present-day payroll difficulties."

*American Zinc Company of Illinois,
East St. Louis, Illinois.*



THE TODD COMPANY, INC., Rochester 3, N. Y.

Please give me the facts about Todd Payroll Systems that speed quarterly reports, cut payroll posting time, increase accuracy, meet State and Federal regulations.

Company _____

Address _____

City _____ County _____ State _____

By _____

BW-9-27-47

passing a particular point on the highway. Main advantage claimed for system: It is unaffected by weather conditions, has sufficient sensitivity to function accurately in rain or fog at distance up to 1,000 ft. Changes in natural artificial illumination reportedly have no influence on the working accuracy of the system.

A metals comparator that distinguishes between different metals and different grades of the same metal is designed for parts inspection and for rapidly sorting supplies of metal parts in stock rooms. The comparator operates on the principle that metals have electrical and magnetic differences as well as physical and chemical differences. A reading on the face of the instrument shows how closely a particular specimen compares with a determined standard. General Electric says the comparator is not fooled by paint, polish, or rust. And one big advantage is that it won't damage the parts being tested.

Availability: for the relay, ten weeks; for the comparator, deliveries beginning Nov. 15.



Adjustable Truck Seat

By permitting a number of different adjustments, a truck seat that is manufactured by Autocar Co., Ardmore, reportedly increases driving comfort and thus reduces driver fatigue on long hauls.

The seat cushion can be raised or lowered through three positions in from three in back.

The back cushion, hinged at its base, rocks through an arc of 12 degrees and has four separate settings.

The entire seat moves forward or backward through nine locations over a range of 5 in.

The seat cushion can be adjusted independently of the back, through three horizontal positions.

Availability: immediate.

Check us first...

FOR LAND

FOR PLANTS

FOR EQUIPMENT



WAA constantly offers good, ready-built properties you can use

corporation executives . . . owners and operators of small businesses: Here's the way to get your new or branch plant into production months quicker! Buying or leasing Government-owned facilities is a lot simpler than battling new-construction bottlenecks and shortages.

Hundreds of good, usable, strategically-located properties are available for you to use now. Big, complete plants or small-scale units; from coast to coast and border to border. One or more of these may exactly suit your requirements or be easily and economically adaptable to your needs. Check and consider the advantageous

features of the plants and facilities listed in the new Plantfinder. Keep your eye on advertisements appearing frequently in newspapers and magazines—offering specific properties in detail. Write, phone or call at your nearest Regional Office for engineering reports or further details—or to arrange for your personal inspection—of any property that you could use.

Yes, the Real Property available through War Assets is a "bet" that you shouldn't overlook. Check us first—find out whether what you want is already built and up for sale or lease at timesaving, moneysaving advantages to you.



NEW PLANTFINDER—FREE...
Describes immediately available properties—lists others soon to be made available—indexed, cross-indexed for your convenience. Write for free copy—to the address listed below, on your company letterhead, please.

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DE WALT "CUTMASTER"

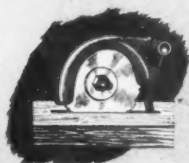
—for fast
precision cutting!



It's a
cut-off saw!



It's a
miter!



It's a
rip saw!



It's a
dado machine!



It's a
shaper!



It's a
variety saw!



All these and more in one machine
—for the price of one. Every time
you change the cutting tool, you
have *another machine*! Write for
catalog. DeWalt, Inc., 359A Fountain
Avenue, Lancaster, Penna.

DE WALT
THE NAME THAT'S FIRST
WITH WOODWORKING MEN

MARKETING

Citrus Prospects Look Bright

Hurricane damage in Florida was slight; California growers revise earlier gloomy forecasts as fresh-fruit sales—spurred by merchandising campaign—turn up; prices rise, too.

The business of growing things has its ups and downs. That's particularly true of the citrus industry. This year's experience is a good illustration.

• In California, despite the gloomy talk in July and August, the citrus industry will come through in fair shape.

• In Florida, the citrus situation looked good all summer. Then it appeared that last week's hurricane would mean disaster for the \$100-million crop. But the picture changed. At the last minute, the tempest swung away from the citrus sections; estimates now are that not more than 8% of the crop was lost.

• Situation in the West—California citrus interests, which would have benefited from a Florida disaster, will pull

out of their recent bad situation—though they will not chalk up the profits of war years.

And in the hungry world of 1947, a propagandist will be able to point to a mountain of unsold oranges rotting in California as an example of the wrongs of an unplanned economy.

Six to eight weeks ago the industry was worried because:

(1) The 1947 summer crop of Valencia oranges was huge—an estimated 66,000 carloads on the trees.

(2) The oranges themselves were smaller than usual. During wartime, prosperous U. S. housewives scored small fruit.

(3) The market for canned oranges

Hushed Popcorn Bags Prove Silence Is Golden

To Irving M. Levin (right) go the heartfelt thanks of martyred adult moviegoers. He's introduced the noncrackle popcorn bag—a deed returning manifold dividends.

The bag was designed originally for a frozen orange juice outfit that went bust. It left as one of its non-liquid assets a stock of 300,000. Levin, division manager of San Francisco Theaters, Inc., took them all.

The bags are laminated cellophane; the glue between the sheets remains soft and deadens the "crackle." They seemed the answer to a theater man's prayer: neat popcorn profits (BW—Mar. 15 '47, p. 22) without the noise.

But after Levin installed them in his lobby stands, sales figures in his six neighborhood houses did fantastic things. In one house sales zoomed 400%; in no single house did they increase less than 50%. Then he found the answer: By coincidence, the yellowish hue of the bags creates the illusion that the corn is drenched in butter.

The price of the laminated is six times as much as straight cellophane, but a 10% sales increase pays the difference.



Irving M. Levin

Levin's now in the bag business. Dobeckmun Co. (Oakland, Calif. and Cleveland), makers of the originals, are now turning them out exclusively for Levin by the millions. They're redesigned for popcorn only, and Levin reports the orders are coming in from all corners in the nation.

Note to matinee kids: The new bags can't be popped.

and concentrates was uncertain. switch to cautious peacetime buying by the retail grocery industry last year had badly shaken canners. Prices were low. On June 24 the average price of all sizes and grades of oranges sold by the California Growers Exchange (Sunkist)—which sells about 75% of the industry's—was \$2.49 a box. Production of the exchange calculated, averaged 1.290 carloads against 1,060 a box. When, on July 12, the average sale price slipped to \$2.25, the growers' faces were long.

Campaign—The exchange was far from idle, however. On May 11 the first advertisement in a \$1-million campaign appeared in newspapers. The ads were directed specifically at the housewife's choice against small fruit; copy stressed that small oranges were the best available.

Magazine ads with the same theme appeared in June. The exchange's merchandising men covered the country, talking up the small fruit to grocers, urging them to take a smaller margin and to adopt pricing practices which engaged greater unit sales (for example, 50¢ price instead of a 1-lb. price).

Results—Toward the end of July shipments and prices started up. In the week ended Aug. 23, the exchange shipped 1,290 carloads against 1,060 the week ended July 19. The price averaged \$3.50 a box.

For the week ended Sept. 6 the exchange shipped 1,215 cars at an average price of \$3.25, and the market seemed

mutual Orange Distributors, second largest factor in the California picture, reported a similar situation in its operations. Added encouragement came from the fact that as the season progressed, the larger fruit became more common.

The Orange Administrative Committee, the industry's statistical office, estimated that fresh fruit sales would absorb about 70%-72% of the unsalable fruit—blight- or frost-damaged, split or undeveloped, or culls would amount to about 2%-4%. That would leave about 26% of the crop as byproducts.

Even if the blackest predictions of July and August worriers had come true, the fruit not sold on the fresh market would have been diverted to byproducts. But the price of fresh fruit at the current market comes to about \$70 per ton, while byproducts are a mere \$20-\$25.

Now, with the fresh fruit market picking up, it looks as if the Orange Administrative Committee's prediction be close to right.

Not Easy—But byproduct fruit is not getting ready acceptance. Canners are using only the choicest available at

first to develop a corrugated box for *both* **SHIPPING and DISPLAY**



SELL FROM THE SHIPPING

BOX! As with most good merchandising ideas, this one is so simple, it's startling. H & D was first to apply it functionally to corrugated box design.

What's the result? A box which gives maximum protection to merchandise enroute . . . and keeps on working after it gets there. A box which, with the flip of a lid, "show windows" your products with colorful, arresting effectiveness on counter or shelf. It is one of many H & D "firsts," which have contributed so much to minimized damage in transit, reduced shipping costs, increased sales for hundreds of industries. The Hinde & Dauch Paper Co., 4710 Decatur St., Sandusky, Ohio.

LOOK TO

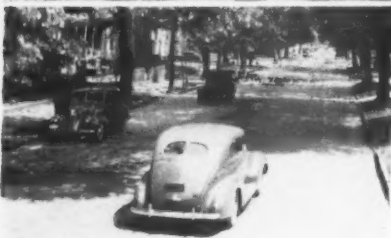


FOR PACKAGING
"firsts"

HINDE & DAUCH

Authority on Packaging

FACTORIES IN: Baltimore 13, Maryland • Buffalo 6, N. Y. • Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Michigan • Gloucester, N. J. • Hoboken, N. J. • Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec • Richmond 12, Virginia • St. Louis 15, Missouri • Sandusky, Ohio • Toronto, Ontario • Boston, Mass.



▲ Traffic-choked streets can be relieved of congestion with expressways like the Davison Limited Access Highway in metropolitan Detroit.



▼ In Augusta, Ga., this concrete residential street, after 25 years, is still giving economical service.

◆ For more than a quarter of a century this concrete street in Wichita Falls, Tex., has carried heavy business traffic at **low annual cost.**

Concrete streets serve best at low annual cost

WHETHER your community is planning expressways, residential streets or bustling business thoroughfares, you'll get the most for your money with concrete pavement because:

1. Concrete usually costs less to build than other pavement of equal load-carrying capacity.
2. Concrete costs less to maintain.
3. Concrete gives long years of service.
4. Concrete reduces wear and tear on your car.
5. Concrete stretches gas and tire mileage.
6. Concrete cuts street lighting costs and improves visibility—helps avoid accidents.

Yes, concrete is tops for your money. And it is your money. Your gas taxes, your license fees and other taxes pay for building streets, for maintaining them, for rebuilding them when they wear out.

So when new streets are to be built in your city, join with other motorists and ask your city officials to specify concrete pavement.

PORTLAND CEMENT ASSOCIATION

DEPT. A9d-12, 33 W. GRAND AVE., CHICAGO 10, ILLINOIS

A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

prices ranging from \$16 to \$25 per ton. To absorb the byproduct fruit would otherwise go unsold except as stock feed, both the exchange and M.O.D. are running their own juice processing plants at top speed. The change even went to canners and is expected for the use of otherwise facilities.

• **Who Will Buy?**—With retail sale of canned orange juice slow and the market for concentrates still relatively undeveloped, what will happen to this fruit juice is a question. The change is counting heavily on two things: the U. S. Dept. of Agriculture school-lunch program (BW—Feb. 1, p38); and the hope that Britain's diet freeze would apply only to fresh fruit, not the concentrates the British use for special dietary purposes (children under six, ailing adolescents, convalescents, pregnant women).

M.O.D. has started an advertising campaign (magazines and newspapers) to promote its Real Good Orange Juice. In addition, it is slowly moving, market by market, across the nation with distribution of Real Good Orange Juice concentrate that is sold in retail grocery stores.



CATERING TO KIDS

American Airlines figures that a child's heart, as well as a man's, can be approached through the stomach. To win favor with the 800-odd small fry who travel on Flagships daily, the line is serving Flagship cookies. A 1947 version of animal crackers, they are baked by National Biscuit Co. in the forms of planes, stewardesses, pilots, hangars.

The companies have also introduced the cookies in retail stores. Philadelphia's Food Fair sold more than 3,000 packages in the first three days.

Buying Reform?

Government purchasing agents agree to try to do better. A recent survey discloses many unbusinesslike practices.

There's good news for businessmen. They can find plenty of hazards in doing business with the various governmental agencies—federal down to local. The government purchasing agents are beginning to realize that there's something wrong with the businessmen's complaints. And they are planning improvements.

Big Market—Governmental purchasing is a booming business today. The lowest estimates of annual volume are about \$7-billion—\$4-billion by the federal government exclusive of the armed forces; \$3-billion by the states and political subdivisions.

Federal tax revenues are at a high, and going higher (BW—12/3/47, p36). This means more money for purchases. And necessary repairs and maintenance of existing facilities fell far behind during the war.

This means that a real market is available. But many potential suppliers are discouraged by the red tape and unbusinesslike procedures of government purchasing that they just won't bother to try to tap this market.

Convention—This situation gave special interest to the recent convention of the National Institute of Government Purchasing. More than 800 government purchasing agents attended. Many supplier companies were represented, too. They heard the results of a national survey, conducted by N.I.G.P., of government purchasing practices—the first such survey ever made. Among findings:

Discounts. Some 47% of the government agencies that replied to the survey reported that they took the discounts after the discount period had expired. The other 53% said they did not, but many added qualifying statements like "unless not too far past due."

Payment. On the question of payment for goods received under contract, variations were reported. The general tendency was toward late payment, up to 120 days after delivery. A total disregard of vendors' regular payment terms was indicated.

Bids. Businessmen who believe complicated legal formulas are used to choose one of identical low bids are kidding themselves. Most tie bids are resolved by tossing a coin. There is also a tendency to award the contract to a local dealer.

Complaints—Businessmen at the N.I.G.P. convention also called for a



In spite of crowded mill schedules, Follansbee may be able to fill your requirements for Cold Rolled Strip in relatively short time. Follansbee service is well-known to its customers—the ability to make adjustments in schedules which is characteristic of this compact, highly skilled organization.

Follansbee will handle your inquiries promptly . . . take care of your orders with rigid adherence to accepted specifications and shipping schedules. Check with any Follansbee Office or Sales Agency on your requirements for Cold Rolled Strip or other steels.



COLD ROLLED STRIP

ELECTRICAL SHEETS

POLISHED BLUE SHEETS

SEAMLESS TERNE ROLL ROOFING

FOLLANSBEE STEEL CORPORATION

GENERAL OFFICES • PITTSBURGH 30, PA.

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Character, Too, Is

Says Kermit Wilson, Fruit Grower



KERMIT WILSON not only believes in and practices his philosophy of richer living, but he also spreads it to others through his county farm bureau and growers' association.

The best people in town

turn to Country Gentleman for things

Farmer Crop

Wendyina, California

Without the people of Agriculture, there could be no industrial America—there could be no nation of factories and big cities. For these 27,000,000 people make possible our food and clothing and shelter.

But their importance to the nation lies in something else, too—something deeper than material things. And nobody knows this better than Kermit Wilson, a Country Gentleman reader and citrus farmer of California.

In Country Gentleman for October, Mr. Wilson expresses in words what is thought and felt by many another farmer . . .

"The farmer's job is not only to produce food for the nation, but moral fiber as well.

"For generations farm children, when old enough, have migrated to the cities. They bring with them moral stability learned the hard way by bucking up against the unbeatable laws of nature.

"They learn that stealing from the soil means poor crops. Livestock reared for means poor quality.

"The farmer can affect the thinking of the country for good or for bad.

"He can sacrifice himself for the nation and turn over the land to the next generation better than when he received it, or he can sacrifice his nation's land for his own materialistic greed and self-interest.

"He can give his children a positive philosophy of national service, or he can give them the 'gimme' outlook that has ruined empires all down through history.

"The kind of thinking done by the farmer, when put into action, has a definite effect on the nation.

"Most political, social and economic trends start in the rural areas and travel to the cities.

"That is why what the farmer thinks and does is so important to his country."

This is what lies in the hearts and minds of the people of Agriculture—those men ride roaring tractors . . . whose women cook and sew and brighten homes . . . whose children work and play, wonder at the croak of air-off frogs, and dream the dreams of youth.

This is how one of them speaks in the seventh of Country Gentleman's "Good Farming—Good Living" articles . . . a series designed to bring inspiration to the people of America who seek happiness from life on the land.



EVERYBODY WORKS on the Wilson place. Priscilla and David know how to milk—and can tote it.



DAVID is learning to care for the trees. With this heater carrier his dad designed, one man does work of two.



ELEANOR WILSON believes in starting a daughter's housework education early, as in this cookie project.



BOY SCOUTS of nearby areas are invited to make free use of Wilson land, wood, water—and oranges.

Country

For Living, Better Living



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SURFACE RACEWAYS
make all surface wiring—

safe wiring!

All National Electric Surface Raceways are made on the famous N. E. "Lay-In" principle. No "fishing" of wires through long and curved "tunnels." Simply screw on the raceway base, *lay-in* the wires and snap on the capping. Smooth . . . neat appearance . . . safe . . . listed and approved by Underwriters' Laboratories, Inc. Write for a copy of: "National Electric Surface Wiring Systems." National Electric Products Corporation, Pittsburgh 30, Pennsylvania.



Everything in wiring points to NE

National Electric
PITTSBURGH, PA.



number of other reforms in purchasing practices. Among the better bid and contract forms; clear specifications; more latitude in specifications and in shipping and packing instructions. N. L. Parsons of the Full Brush Co. mentioned a case where a state's rigid specifications for brush forced a special manufacturing run increased cost to the state.

The purchasing agents also had some complaints of their own on some business practices. For instance, Carl Riggs, West Virginia's purchasing director, pointed out that 40 states now have centralized purchasing departments. But in many cases they are forced to buy in wholesale lots at retail prices from local representatives or dealers of big vendor companies. Reason: The companies refuse to deal directly with the states on the ground that their local dealers should get the business.

• **Recommendations**—Everyone at the convention realized that, in many cases, the purchasing agents themselves are powerless to make the needed change in procedure. But a panel discussion, which included both purchasing agents and businessmen, drew up a number of suggestions for change which the purchasing men agreed to recommend to their state legislatures for action.

Most of the businessmen present agreed that there has been noticeable improvement recently in government purchasing practices. A lot of the credit for this, they agreed, is due to the work of the institute, of Albert Pledell, its president, and of Albert H. Hall, its executive director.

• **School**—There was a graphic indication of the institute's accomplishment. At the convention opened, the U. S. Treasury Dept. announced that it was going to set up a National Academy for Public Purchasing. Objective: nationwide interchange of knowledge on buying practices and techniques. Federal, state, and municipal purchasing officers will attend periodic sessions in Washington to hear outstanding figures in the purchasing world and to study latest procurement practices. The institute has long urged this.

SUIT OVER LIQUOR

Price squabbles between Joseph E. Seagram & Sons, Inc., and distributors who raised prices after OPA's end have culminated in a lawsuit. Kiefer Stewart & Co., a liquor wholesaler, has brought the suit in a federal court in Indianapolis against the distiller. Kiefer Stewart charges that, when it raised its prices to retailers and other buyers, Seagram stopped deliveries.

The wholesaler is asking triple damages, alleges violation of antitrust laws, and claims a revenue loss of \$325,000 during the last 11 months.

History-making power stations

No. 7 Waterside Station—



**Consolidated Edison Company
of New York, Inc.**

PERHAPS no public utility station in America so perfectly parallels this century's progress in power generation as the Waterside Station of the Consolidated Edison Company of New York. Existing from about the turn of the century, this station has spanned virtually the whole development of power practice from small, hand-fired boilers and engine-driven generators to the giant, high-pressure boilers and turbines of the present day.

Although expanded and improved through the years, the real modernization program of the two plants comprising Waterside began in 1936, when work was started on the installation of eight huge boilers to replace the ninety-two old boilers in Plant 2. Modernization of Plant 1 is now well under way and the two boilers being installed will replace fifty-three. Extensive improvements with respect to turbines and other equipment have accompanied the boiler replacement program.

This is, without question, the greatest modernization project in the entire utility field... one of the world's largest power stations completely rebuilt...

its capacity nearly doubled within the same building space... its economy vastly improved.

This policy of continuing modernization, characteristic of the electric utilities generally, is one of the big reasons why this industry is in the unique position of being able to sell its product today at a lower price than before the war. Electricity, long recognized as America's most valuable servant, continues to be America's best buy.

Combustion Engineering is proud of its major part in the Waterside modernization program. Eight of the ten high-pressure boilers replacing 145 old boilers are of C-E design and manufacture. Four of these units have capacities of 500,000 pounds of steam per hour, two of 615,000 pounds and two of 1,000,000 pounds.

**COMBUSTION
ENGINEERING**

200 MADISON AVENUE • NEW YORK 16, N. Y.

The association of C-E with Waterside and many other power stations that have made history speaks for itself. The experience, special skills and advanced engineering that have brought about these associations are available to you, whether your steam requirements be large or small.

These three factors are the unwritten plus-values in every C-E contract —

Knowledge — to solve today's, and tomorrow's, steam generating problems.

Experience — to interpret, from a world-wide background in every important industry, the specific needs of each installation.

Facilities — to manufacture complete steam generating units for every capacity from 1000 pounds of steam per hour up to the largest. B-16

ANOTHER
BOSTITCH
EXAMPLE



A BIG PROFIT IS A LITTLE SAVING multiplied a hundred thousand times



A mid-western specialty manufacturer reports that the use of Bostitch preformed staples thru an aluminum plate has eliminated the cost of a nut plate, tacks, drilling holes, and nailing on one of

his products—a rubbing block—for a total saving of 75%... On a paint stippler—a heavy fabric job—he does the fastening 12 times faster than before... He chose Bostitching also for the assembly of a toy garage; because, as he says, "It is the best, quickest and cheapest" of the numerous methods he had considered.

Many manufacturers, finding such Bostitch profits in one department, are surveying all their fastening operations to find other places where Bostitching may help.

Thousands of combinations of all kinds of materials, metal, cloth, paper, wood, leather, plastics... are fastened better and faster by Bostitch's 800 models of stapling, tacking, and wire stitching machines. *Maybe you, too, can profit by applying this method to your fastening work.*

250 field men in 91 key cities place at your service the benefits of 50 years' Bostitch research and experience.

Write for data on representative models of the world's most complete line of wire fastening equipment.



Bostitch, 380 Mechanic Street, Westerly, R. I.
(or Bostitch-Canada, Ltd., Montreal).

Send free folder on complete Bostitch line ☐, or on (type of work)

Name

Company

Address

Soaps Face a Fight

Use of synthetic detergent is rising. But soap-makers are too worried—they make both soap will always cost less.

The long-anticipated struggle between soap manufacturers and the makers of synthetic detergents may prove to be no more than a skirmish. The soap makers admit some concern, but they still sleep soundly at night. Close observers of the situation give three chief reasons why competition may not reach debacle proportions:

- The big soap manufacturers are already hedging their bets by producing their own synthetic cleansers.

- Many proponents of both types of cleaning agents predict that the market for all such products is due for tremendous expansion.

- The economics of the situation are such that detergents will probably never be able to drive soaps out of production by price competition alone. If the synthetics steal the market, they will have to do it on performance.

- **Confidence**—Detergent makers think that they may be able to do just that. For detergents, popularly known as "soapless soaps," offer many cleaning advantages. Certain of a soap's ingredients combine with minerals in the water to form an insoluble scum which is occasionally found on bathtubs and glassware, and in textile fibers. Synthetic detergents leave no scum.

In hard-water areas, synthetics perform particularly well. It is hard water that makes the most scum with soap.

But the synthetics have a drawback, too: They won't wash cotton goods as well as soap.

- **How They Work**—The essential difference between soaps and synthetic detergents lies in the way they remove the dirt. Soap does the job by itself combining with the dirt to form a suspension in water. Synthetics, on the other hand, cause the dirt to combine directly with the water. Their action is akin to that of the "wetting agents," long used in dyeing textiles.

One of the first wetting agents, known as Turkey red oil, came into use about 1875. It was a sulfonated castor oil which caused textile materials to "wet out," and made lime-soap precipitates less dangerous to cloth. But it wasn't a cleaning agent.

- **War I Boost**—The fat shortage in Germany during World War I stimulated the search for soap and sulfonated oil substitutes, particularly for industrial purposes. Continuing research in the mid-twenties led the German firm of H. T. Boehme to concoct a wetting



Proof that you ought to figure parts costs in **ALCOA ALUMINUM**

Before he switched to Alcoa Aluminum 11S-T3 Screw Machine Stock for most of the parts of this insecticide spray gun, the manufacturer had made the gun almost entirely of brass.

The tag on each of the aluminum screw machine parts shows the total saving on that part by switching from brass and cadmium-plated steel to Alcoa Aluminum. He uses 11S-T3, the screw machine alloy that will permit *you* to make similar savings.

Note the saving on parts. Then let us give you further information on Alcoa 11S-T3. Sales offices in leading cities, or write to ALUMINUM COMPANY OF AMERICA, 2104 Gulf Building, Pittsburgh 19, Pennsylvania.

Chalk up Alcoa 11S-T3 as another outstanding example of Alcoa Research. This free-machining alloy was developed for use in automatic screw machines.

This same type of research has made practical the many other Alcoa Aluminum Alloys that are tailored to make aluminum do more jobs better.

When you specify "Alcoa Aluminum", you get the benefit of Alcoa's research and 59 years of making the best aluminum for every purpose.

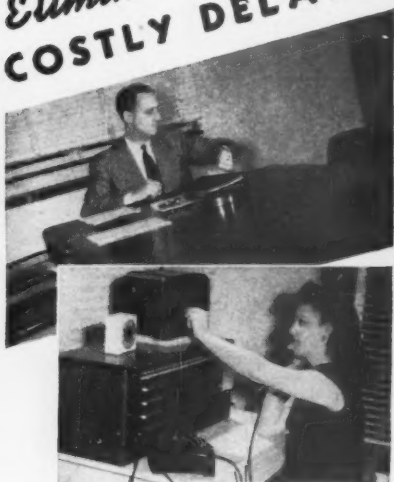
MORE people want **MORE** aluminum for **MORE** uses than ever

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FIRST IN ALUMINUM



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COSTLY DELAYS-**



**— When important
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CLEANING STREETS with synthetic detergents. New uses keep the market growing.

agent known as Gardinol. Gardinol had an advantage over other wetting agents—it was a cleansing agent as well.

The U. S. had its first experience with Gardinol about 1930 when Allied Chemical & Dye Corp. brought it from Germany. Shortly thereafter, however, Allied's National Aniline Division developed the Nacconols, washing agents derived from a petroleum base. Detergents produced from oil products were cheaper to make than Gardinols, which were based on coconut oil. So Allied concentrated on Nacconols. Procter & Gamble and E. I. du Pont, meanwhile, obtained joint rights for production of the Gardinols.

• **War II Boost**—During the thirties, although a few household products appeared, industrial users consumed most of the synthetic detergents produced. With World War II, however, the soap shortage in the United States caused a flood of synthetics into the household market.

The wartime expansion did not find the soap companies lounging in their bubble baths. Most of them had been experimenting with the new-type cleansers for a long time. One by one they put them on the market. Except for a possible sentimental attachment to natural soaps, the soap companies are now happy to sell whichever product the American housewife eventually finds that she prefers.

• **Misconceptions**—Before the housewife makes her decision, the synthetic makers want a chance to educate her. Many housewives do not know what detergents can do. They are often ignorant of what they are. One Chicago manufacturer who makes both kinds of cleansers reports that during the war he made four to five times as much synthetic cleanser as soap. Many users, however, went back to soap when it became available. Its lower price seduced them even though the detergent had done a better job. The public needs to be educated,

says this manufacturer, to the fact that in many cases higher-priced detergents are cheaper in the long run.

Another misconception which plagues a few synthetic makers arises from the fact that some synthetics do not make suds although they do a good cleaning job. Housewives have become so accustomed to soaps that produce suds that they don't trust nonsudsing detergents. So many of these manufacturers have added sudsing agents to their products even though they add nothing to cleaning efficiency.

Both soap and synthetic makers expect the market for their products to grow enough to let everyone have plenty of business. They look forward optimistically to a tremendous increase in the number of items—from cellar doors to building facades—which will be washed in the future. Cleaning streets with a foaming solution of synthetic and water, as was done recently in Toronto (picture, above), is only one of the uses they feel will become general.

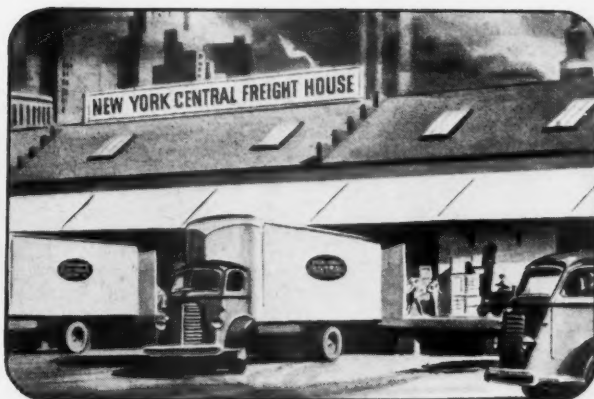
• **Price Facts**—But there is an even bigger reason why synthetics will never drive natural soaps off the market, according to the soapmakers: many soaps are made from fats and tallow which are byproducts of the meat-packing industry. These byproducts must be disposed of, no matter how low the prices go.

So if the price of synthetics were lowered to a point where people bought them in preference to soap, the price of fats and tallow would drop. Reason: The supply that had to be sold would remain constant while the demand would have decreased. Thus fat and tallow prices would descend to a point at which the soaps would again have a price advantage. This would go on happening, say soap men, no matter how low the price of detergents might go.

• **Self-Competition**—Still another factor limits the possibility of a fight to the

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Quitting Time is Starting Time! As the working day ends at factories and warehouses, last minute shipments pour in by truck to New York Central. Expert freight house crews hustle the goods aboard such famous overnight merchandise trains as the red and grey *Pacemaker*.

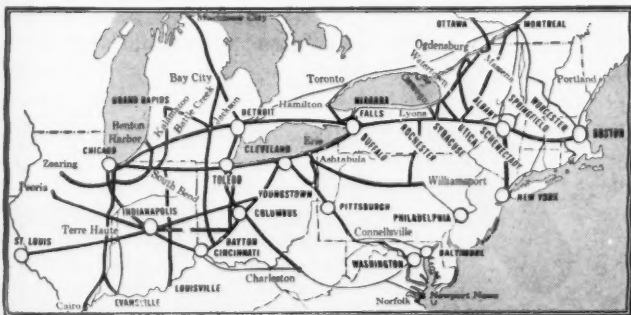


Saving a Day—at Night! Speeding under the stars between New York and Buffalo, the *Pacemaker* clips a full business day from freight delivery schedules to key mid-west markets. And fast merchandise service links major cities along New York Central's 11,000 mile rail network.



Here Today—There Tomorrow! Being able to shift goods speedily means fewer main distribution points . . . smaller local stocks . . . lower distribution costs . . . and more satisfied dealers. It's just one of many important reasons for giving your new plant or warehouse a "Central" location.

NEW YORK CENTRAL serves you before and after you pick a "CENTRAL" Location



HELP FOR PLANT PLANNERS. Within the New York Central area are concentrated 52% of U. S. buying power . . . 66% of U. S. skilled labor . . . 75% of U. S. bituminous coal and steel production . . . and great ports handling 85% of U. S. Atlantic coast foreign trade. Let us help you find the right "Central" location for your plant or warehouse in this favored area.

HELP FOR SHIPPERS. Ask New York Central for expert help in handling your carload or L. C. L. shipments.

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APPLICATIONS include: Containers for medicinal gases such as oxygen, nitrous oxide and ethylene; oxy-acetylene units in portable cutting equipment; in deep sea diving for breathing apparatus; in the mining industry for inhalators, resuscitators, and other safety equipment; portable fire extinguishers; as pressure accumulators or power reservoirs in many air and oil pressure systems to store energy and power to actuate many types of equipment in the industrial, automotive and aviation fields.

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CONTAINERS FOR GASES, LIQUIDS AND SOLIDS

finish between the old-line soap-makers and the manufacturers of synthetics. Some chemical companies now enter the synthetics field are the same firms that supply the soap companies with chemicals for making their own synthetics. So these chemical companies may have to choose between competing with their own customers or accepting a role as supplier only.

Oronite Chemical Co., subsidiary of Standard Oil of California, is one concern which has already made its decision to remain a supplier. Its product, an intermediary in the manufacture of synthetics, has experienced a rapid expansion of sales. In the first half of 1947 the company doubled its dollar volume of sales over the preceding six-month period. It expects to quadruple the 1947 figures for the last half of 1947.

• **Monosyllabic**—When it comes to naming their products, the synthetic makers run wild. The current tendency is to stick to short, one-syllable names. For industrial use Allied Chemical Dye finds Nacconol a satisfactory name, but for household use the product is called Swerl. Allied markets Swerl through H. J. Heinz Co.

Other chemical companies are putting out one-syllable detergents, too. General Aniline & Film markets Clim. Monsanto Chemical Co. has named its product All.

Procter & Gamble puts out a diversified line of synthetics. These include Dreft and Tide for household use, Drene and Prell for shampooing, and Teel for cleaning teeth. Colgate-Palmolive-Peet promotes Vel, a detergent with a name based on the middle syllable of the word "marvelous." Lever Brothers' entry is named Breeze.

• **Small Competitors**—Running hard to keep up with the large synthetic producers are a host of smaller companies. These companies, too, lean heavily on short names such as Klens, Rad, Sco, Sheer, and Tops. Occasionally, however, a few extra syllables creep in, as Woolfoam, Betty Brown Bo Peep, All Purpose Soapless Suds, Savog Coldfoam, and Atomic Fluff.

P. S.

Stromberg-Carlson Co.'s plans to broadcast the Rochester Civic Orchestra over the Continental FM Network (BW—Sep. 13 '47, p. 21) were jolted last week. James C. Petrillo's American Federation of Musicians forbade the orchestra to play the second of 10 scheduled broadcasts. Stromberg-Carlson countered by presenting the Tonia Liedertafel, a male chorus of voices.

The Dept. of Commerce is setting up a special one-man staff to assist and serve retail merchants as distinguished from . . . manufacturers.

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BUSINESS WEEK REPORTS TO EXECUTIVES ON —

THE NEW AMERICAN MARKET

World War II scrambled the economic geography of the United States. The war and postwar changes in economic development of various regions were many and complex. Their effect on marketing cannot be overestimated.

In the sixth of a series of regional reports on the New American Market, *Business Week* explores the Farm West. Detailed statistical data, which could not be included in the report itself, will appear in a supplement report reprints.

Next month: the Southeast.

NO. 6 THE FARM WEST



The Biblical seven fat years were reproduced in the Farm West in the years that spanned World War II and the immediate postwar era. Through war and peace, good fortune visited the Farm West.

For seven years, this region garnered a rich harvest from its soil. Farming paid handsomely. And, in a region where agriculture is so basic, the city as well as the farm benefited.

Income from the farm shot way ahead of the U.S. It contributed most importantly to the region's over-all income gain (a fifth of all regional income comes from farming—the most of any region).

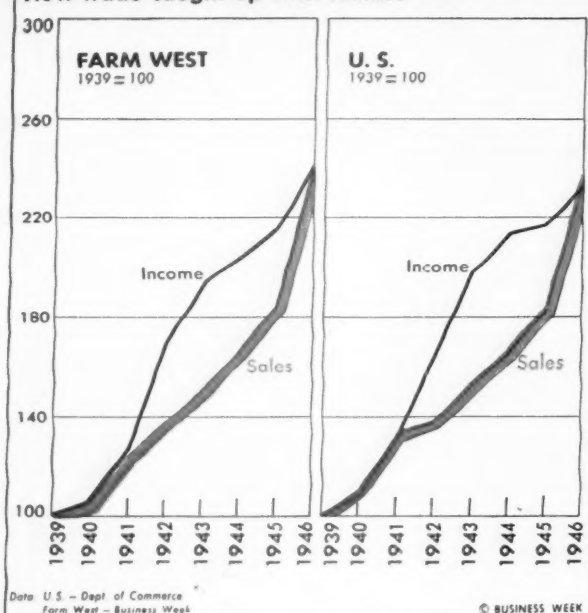
A good part of the gain was recorded while America was at war. But, by comparison with the national performance, it was not impressive.

In short, the Farm West put on its spectacular performance since the end of the war—and the end of price control over farm products.

Even more spectacular, however, has been the region's per capita income showing. It takes only simple arithmetic to show how income per person accelerates more rapidly if population declines as total income increases. And that's what happened here.

The Farm West lost population, by 1.3% from 1940 to 1946 (the national gain was 7%). Farm West total income went up 140% vs. 130% for the United States.

FARM WEST SALES AHEAD OF U. S. How trade caught up with income



As a result, its per capita income gain was 143% vs. 116% for the U. S.

Important as farming is in the region between the Rockies and the Mississippi, other occupations contribute heavily to gains in total income and total employment.

Manufacturing is the most unexpected sample. During the war and postwar years, there was a gain slightly above the national average in manufacturing employment (a 55% rise in Farm West factory jobs vs. 46% for the U. S.).

Employment by the federal and local government was up. But it was a below-average gain. The same thing is true about employment in the fields of trade, services, and utilities.

Actually, there was a 28% rise in nonfarm employment of all kinds while farm employment went down 10%. This decline compares with an 11% drop in the U. S. The regional decline has to receive greater weight since farm employment there was more important at the start. Result: Total employment went up only 4% since 1940—the smallest gain of any region.

A shrinkage in farm population and farm labor did not mean a reduction in agricultural output. On the contrary, the region played a stellar role in the food production race. Total farm output was 37% larger in 1945 than in 1939, compared with a 23% increase for the U. S.

Fewer farmers, fewer farm hands, larger crops, higher incomes, and great per capita income gains are mainly the result of the farm revolution. Except for two reasons, the result would not have been so successful though. One, record demand existed to bolster prices. And, two, crop conditions were nearly ideal for growing purposes.

Farm success stories are being told throughout the region. The locale for the most astounding ones is in the western wheat belt.

A farmer drove up to a Cadillac agency in a central

Kansas town. In a few minutes he had bought and paid \$4,500 for a "green" car because his wife had always wanted one of that color. The dealer claims the farmer didn't even know he had bought a Cadillac or what the list price was (about \$1,000 cheaper).

A farmer in eastern Colorado paid off the entire cost of a 7,000-acre cattle ranch with his income from one year's wheat crop.

A western Kansas farmer built grain elevators to hold 450,000 bushels of wheat several years ago. He figured he would serve all the farmers in his locality. This year his own harvest was 465,000 bushels.

A farmer came into Kansas City one Friday in June with \$3,500 in his jeans. By Sunday evening, he had a penny left. He had bought a Chevrolet for \$2,700 and spent the remainder in taverns and restaurants. His experience became public knowledge when he reported the car had been stolen.

Members of the Kansas state legislature eagerly paid down \$1,000 advance payments on combines promised for delivery by the time of the 1947 harvest. When combines failed to appear, it developed the seller had no combines but had collected \$270,000. He didn't, however, have much left when an involuntary petition for bankruptcy was filed.

These are the tales which reflect the farm prosperity now spread all over the landscape.

MAKEUP OF THE MARKET

To better appreciate and understand the changes wrought, from 1939 to 1947, a knowledge of the regional prewar is necessary.

The region is the food basket of America. Farming is the principal way of life. That's shown by the figures which show the regional occupational breakdown, contrasted with the U. S. (employment groups as percent of total employment):

Group	Farm West	U. S.
Professional	7%	7%
Nonfarm proprietors	9	9
Clerks, etc.	17	18
Skilled workers	9	11
Semiskilled workers	14	20
Unskilled workers	22	24
Farm proprietors	22	11

In the nation, only 11% were classed as farm proprietors in 1940 and 6% are farm workers, making a total of 17% who gained their living from the soil. By comparison, 28% (22% farm owners and 6% farm workers) got their earnings in this one region from agriculture.

Naturally, since such a large proportion of the working force is rural, the percentage of city dwellers is lower.

Historically, this region grew as the national trend, a region to expand toward the West. The United States had begun its beginnings on the Atlantic seaboard. By the time the New World territory had been opened for settlement, the far west as the Mississippi.

Gradually, the covered wagons began to move across

FARM WEST INCOME SPURTS AHEAD OF U.S. INCOME

Farm West draws more income from agriculture...

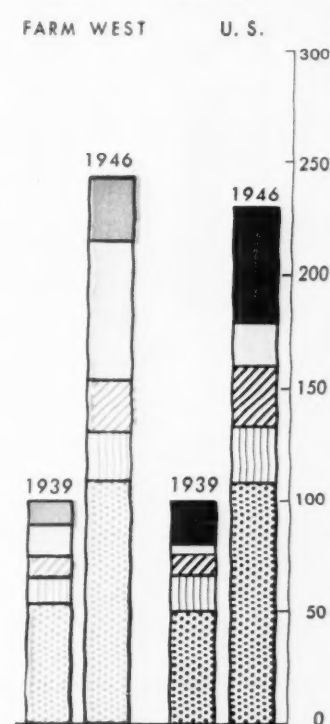
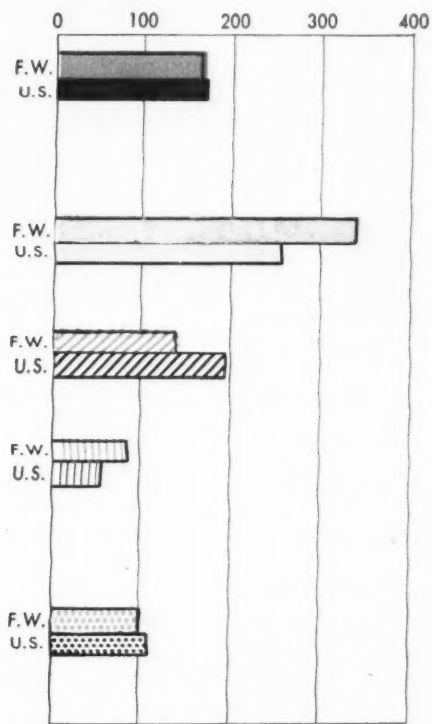
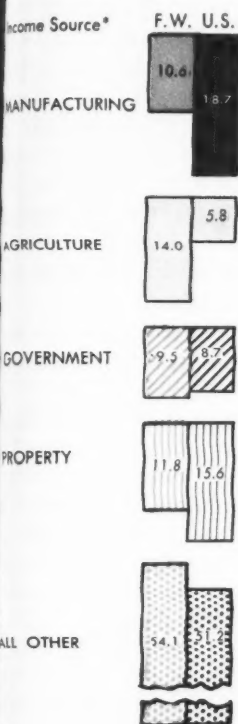
And its farm income shot ahead of other income...

So its total income gained more, too.

Type of income as percent of total, 1939

(Percent gains, 1939 to 1946, by type of income)

(1939 total income equals 100)



*Manufacturing: payrolls only; Government: civilian and military pay, plus allotments; Agriculture: farm proprietors; Property: rents, dividends and interest; All Other: income from trades, services, utilities etc.

1939 - Dept. of Commerce
1946 - Business Week

© BUSINESS WEEK

Great Plains. This was the beginning of this Farm West region—the era which has been exploited so frequently and so dramatically in motion pictures. “Dodge City” and “Cheyenne” are some of the Hollywood roller versions of the stage coach days.

Growth of the Farm West then paralleled the extension of the railroad system across the continent.

Population Trend

In 1860, the region had a population of 2.2-million, amounting for 7% of U.S. population. For 30 years, total population continued a rapid increase. By 1890, there were 9.5-million people in the Farm West and they made up 15.2% of the national total.

The tag end of the nineteenth century marked a significant period for the region. Although population crept up after 1890 for another 50 years (1940 count: 15.4-million), a relative decline set in. Steadily, the Farm West population became a less significant proportion of the national total. In 1940, the percentage of U.S. total was down to 11.7%.

That long-term decline, of course, is typical of a heavily industrialized area. Naturally, the more industrialized areas grew as more and more people flocked to the cities.

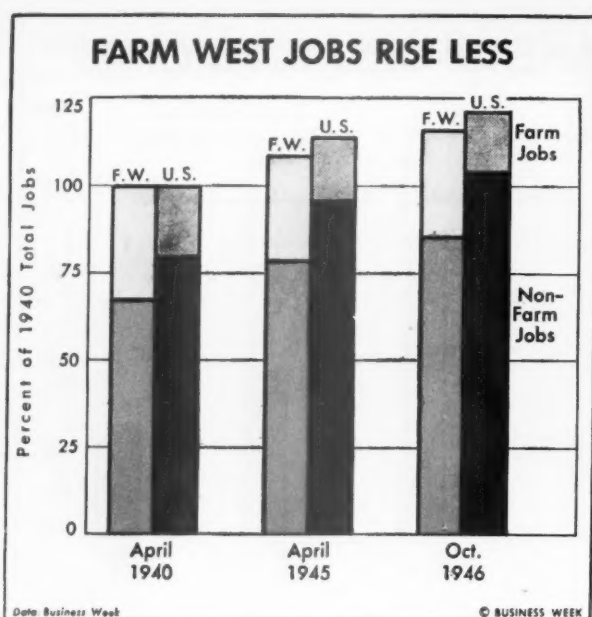
Newer parts of the nation—the Far West and the Southwest—attracted more of the adventurous souls.

One other thing helps to explain the slackening in the rate of growth. It is the mechanization of farming. As Cyrus McCormick's reaper began to be used in the grain fields, the need for hand labor diminished. It took fewer men but more horses and traction engines to get out crops and harvest them.

The farm revolution really took hold as tractors were put into use. And the Farm West took to tractors like a chorus girl to a millionaire. By 1940, the region was almost twice as far advanced in the farm machine age as the rest of the nation. In that year, 44.4% of all farms in the Farm West had become tractorized (vs. 23.1% for the U.S.). Since farms in the area are comparatively large, many farmers bought more than one tractor. This is revealed in the percentage of tractors to the number of farms (49.2% vs. 25.7%).

Although the Farm West had a mite less than one out of five farms in the U.S., it had better than one out of every three tractors in 1940.

This is the region where the word “harvest” has the same pleasant connotation as “payday” in the cities. For the Farm West accounts for 43% of all U.S. harvested



acreage. Its share was fairly constant for decades but it fell in the 30's, reflecting effects of the dust bowl drought.

Out of every 100 bushels of wheat, 57 come from the Farm West. The region yields 47% of all U.S. corn, 55% of the oats, 32% of all hay.

Out of all farm marketing income in the U.S., the Farm West accounted for 31% in 1929. This percentage dropped to 27% in 1939 but had returned to 31% in 1946. That is less than its share of harvested acreage of the nation.

Actually, about 70% of Farm West farm receipts derive from livestock products, not crops. This proportion has stayed fairly stable (70% in 1929, 71% in 1939, 68% in 1946).

This is explainable by contrasting the region's type of agriculture with other parts of the country. Farm West feed crops are marketed as livestock products rather than for cash. Farming is more intensive in the Far West in growing fruits and vegetables; it is likewise true in dairying and poultry raising in the northeastern parts of the country, which use less acreage and more manpower; and the same goes for cotton growing in the South.

The region's percentage of U.S. total crop income is smaller still. It ranged from 20% in 1929 to 19% in 1940 and 22% in 1946. For the same reason, the Farm West share of livestock product income is higher—39% in 1929, 34% in 1940, and 38% in 1946.

Regional Industry

The most significant thing about industry in the Farm West is the close alliance between it and agriculture. For food producing is the most important segment of industry.

This is readily apparent as you visit the cities of the area. What companies generally employ the largest number of workers? Armour. Swift. Wilson. Cudahy. Pillsbury. General Mills.

Swift & Co. packing plants are located in Kansas City, Kan.; South Omaha, Neb.; Sioux City and Manhattan, Iowa; Denver, Colo.; South St. Paul and Winona, Minn.; South St. Joseph, Mo.; and Watertown, S. D.

Swift also operates three associated meat packing plants in this region. They are the Independent Packing Co. at St. Louis, the Iowa Packing Co. at Des Moines, and the Arnold Bros. at Perry, Iowa.

The same broad dispersal of operations is found in grain processing. Take General Mills, Inc., as probably the best example. This company has flour mills located at Minneapolis, Kansas City, Wichita, Great Falls, Minn., Kalispell, Mont. Feed mills of the company are operated in Minneapolis and Kansas City. Cereal foods are also packaged in plants at Keokuk and Oskaloosa, Iowa, and Minneapolis. And at Belmond, Iowa, soybeans are processed. In eight cities, General Mills has large facilities for grain storage.

The importance of the food sector remained steady during the years 1940 to 1946, changing its share of total U.S. factory jobs only from 14.1% to 14%.

Industrial growth since the war is following the pre-war pattern. Most of the new plants that have been established are for the purpose of processing agricultural products. Poultry dressing plants, milk evaporation and dehydration plants, creameries, and canneries are most common.

Surprisingly, the Farm West increased its share of U.S. manufacturing in most other lines.

Expansion in the machinery division is due in part to agriculture, too, since it includes farm machinery (Minneapolis Moline Power Implement Co., Gleaner Harvester Co., Corp., Dempster Mill Mfg. Co., and Woods Bros. are prominent firms in the area).

Although nothing in Farm West industry can compare with food processing and kindred lines, the region has a representative showing in almost every kind of manufacturing.

A bird's-eye view of the whole industrial change is best provided in the following table, which shows the percentage of all U.S. factory jobs in the Farm West:

	1939	1946
Total	5.7	6.0
Durable	4.2	4.8
Metals, etc.	3.6	4.1
Machinery	4.8	5.1
Transp. equipment	2.5	3.2
Lumber & timber	4.6	4.1
Furniture	4.8	5.8
Stone, clay & glass	7.5	7.1
Nondurables	6.7	7.1
Textile mill products	0.7	0.8
Apparel & leather	6.5	7.1
Food & tobacco	14.1	14.0
Paper & printing	7.4	7.8
Chemicals—oil—rubber	4.6	5.1
Miscellaneous	1.9	5.1

There is this to be noted, too, about industry in the region: The states lying farthest east have the largest share of manufacturing. Missouri, for example, had 40% of regional factory jobs, with Iowa and Minnesota the

the biggest states. Missouri is distinctive in that it is the state in the region having as much employment in industry as in agriculture.

WAR AND POSTWAR

When demand for anything is sustained at a high level, production must be high to maintain an ideal balance. That elementary bit of economics was perfectly demonstrated all through the war and postwar years. The prize example is the combined wheat and corn belt of the U.S. and the West.

Before Pearl Harbor, Uncle Sam made it plain that agriculture could not suffer to accommodate the nation's industrial expansion. One of the seven members of the National Defense Advisory Commission spoke for the farmers. It didn't take long to coin the slogan: "We will win the war—don't waste it." When the draft was shifted from a peace to war tempo, of incentives for farmers were provided.

The Farm West did a first-rate job of feeding the military and civilian population. (Rationing of foodstuffs became necessary but not because of below-normal production.)

It is the big crop increase which stands out in this region. From 1939 through 1945, regional crop production rose 35% vs. 17% for the U. S.

As for production per worker, the Farm West scored high, too. Compared with a rise of 26% for the U. S., the Farm West recorded a 37% increase from 1939 through 1944, the Farm West recorded a 37% increase.

How was this splendid performance put on? Not by an increase in farm labor force. On the contrary, war industries lured many a farm worker away from the plow to the assembly line. And even the draft deferments were weakened as the armed forces' demand rose manifold.

The net result was a loss in farm population. From 1939 through 1941, the region's drop was not as heavy as in the dust bowl period. But from 1942 through 1945, the shrinkage was much greater with the result that the total was off about 14%.

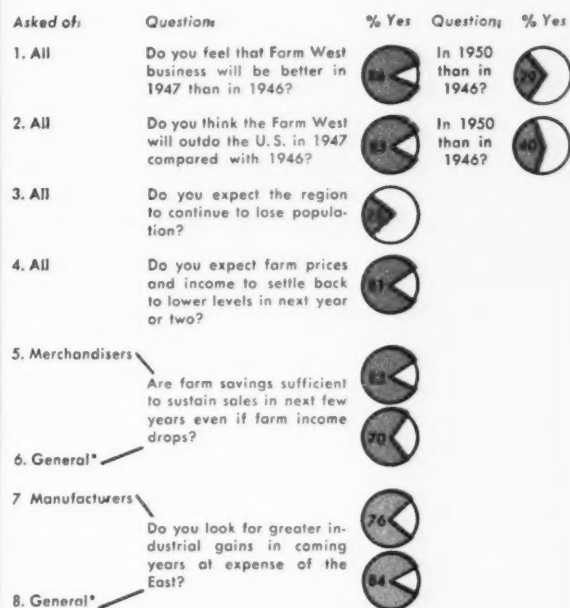
The trend reversed itself at war's end. At the beginning of this year, it was estimated a 6% increase had been regained, mostly due to men returning home after being discharged from the military services. There was a large migration from the farm to the city in this region. The migration might have been wholly regional. That is, those living on the region's farms had moved only to the region's cities. But this is what happened.

Only a part shifted their residence and occupation to big cities. Many, many others went farther away to the West Coast or to such war industry centers as Detroit. However, the region's industry did expand. Its percentage rise, as big as it was, must be discounted because of the relatively small proportion it is of the total.

There never was a real boom in war production in the region except in a few spots, such as St. Louis and Wichita.

FARM BELT MAKES ITS FORECAST

Business executives of the Farm West were asked in a poll conducted by Business Week to give their opinions on the region's future. Returns from a diversified group yielded these results:



*Includes Banks, Advertising Agencies, Newspapers, Public Utilities.

Record farm yields and record farm prices this year obviously had their effect on businessmen's thinking — seven out of eight of them believe 1947 business will surpass that of last year.

They are not so bullish however on the business outlook for the Farm West when they look ahead to 1950. Here again their opinion seems to be influenced considerably by the agricultural situation, which can hardly be expected to stay near perfect. In fact, four out of five in the region anticipate a decline in farm prices in the next few crop seasons.

The farmer's good fortune in being able to store up cash for a rainy day is counted on to cushion any drop in retail sales volume. Meanwhile, a great majority of business leaders see greater industrial growth in this heavily rural area.

Data: Business Week.

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As a result, the disappearance of munitions making did not wipe out very much.

There were not very many plants built in this region exclusively for war production. So, there were fewer to be studied for reconversion possibilities.

PROSPECTS

The future of the Farm West revolves mainly on farm prices.

Earlier this year, the consensus of economists was that prices of farm products would drop something like 20% by the year-end. That idea has been left high and dry.

Farm forecasters say prices will go down a little. Or they may rise a bit. Or they might stay put.

One reason is the shorter corn crop this year. The latest

Where Farm West Dollars Go

Despite its heavily rural character, Farm West's market patterns closely parallel the nation's. Income per person now averages a trifle less than nationally. But less of it is paid out in U. S. income taxes—9% vs. 11% for the U. S. And because living costs are lower in rural sections, the income goes a longer way in retail markets.

Partly in consequence, the region accounted last year for 12.0% of U. S. retail sales whereas its income share was only 10.4%. Retail dollars moved pretty much into the same channels as nationally, though a bit more went for cars, gasoline, and goods for the home, and a bit less to apparel, feed, and similar stores (1939 sales breakdown as percentage of the total):

	U. S.	Farm West	Difference
Food	24.2%	24.1%	+0.1%
Eating & drinking....	8.4	8.0	—0.4
Gen. merchandise....	13.5	12.8	—0.7
Apparel	7.8	6.1	—1.7
Drug stores	3.7	4.0	+0.3
Filling stations.....	6.7	8.7	+2.0
Automotive	13.2	14.5	+1.3
Bldg. mat. & home furn.	10.6	13.3	+2.7
Other (fuel, etc.)....	11.9	8.3	—3.6
Percent to chains.....	21.7	20.0	—1.7

Chains do only 20% of all retail trade here versus 22% nationally.

Some 12% of Farm West people are over 60 years of age, as against 10% for the country as a whole; but the proportions of children under 18 are the same; clearly, young adults move out of the Farm West.

government estimate is that 900-million bushels less will be harvested this year compared to 1946.

To a degree, that does not represent a real loss to the farmers of this area. It is taking money out of the farmers' pockets in the form of less output. But to a large degree it is putting the money back in the form of higher prices.

Other reasons for the belief that a high price level will be maintained this year and probably next are: exports, general business conditions, and wages. They are all on the plus side at this time.

- The world is still faced with a food deficit. As long as America is looked upon as the world's granary, it will be expected to meet this deficit as far as possible. The Marshall plan for aiding Europe means continued relief. Implementation of that plan will require high level food shipments abroad.

- With the U. S. generally at the nearest practical level to a full economy, farm prospects are good. It would be a different and sadder story if business slumps. For a farmer's prices would drop most in any over-all slipping of prices and sliding of production.

- The extremely high level of wages and wage rates encouraging, too, to the farm outlook. More money in the pay envelope spells more money to be spent on groceries. And the Lewis lever on wages which tilted coal miners' pay again created an inflationary psychology helpful to current prices.

A longer range squint at the farmer's future brings a different picture into focus.

The ideal combination of high yields, high demand, and high prices is too much to hope for on a permanent basis. Sooner or later, the gears will slip and the bonanza days will be over.

Some letdown must be expected eventually in the farmer's relative place in the economy. It could happen in the next year or so. Even then it would only be a moderate decline.

Four things are counted on to temper a downturn:

- (1) Federal aid from Washington. The end of the current price support program next year will not mark the conclusion of this kind of assistance. A federal program to support agriculture one way or another is almost as certain as death and taxes.

- (2) Progress in farming. More efficient methods, increased mechanization and more scientific farming will pay dividends to this region. Consequently, net income need not drop so sharply as it did after World War I.

- (3) Reduced mortgage debt. Farmers of this decade do not have to add a lot of money interest payments to the cost of operation. In some cases, no interest payments need be included since the farms are held free and clear. This financial status of the farmer will also tend to keep his buying power up—he can spend most or all of his cash without the usual worry about the farm debt. And if worst comes to worst, he can increase or restore his mortgage with little trouble to tide him over a poor season or two.

- (4) Accumulation of liquid savings. Farmers in this region salted away a lot of their cash in banks. Savings were several times greater than the reduction in mortgage debt. A tiny Colorado country bank which could change a \$50 bill in dust bowl days now has deposits over \$2-million. Naturally this cash backlog is important to purchasing power.

WITHIN THE REGION

The pattern of behavior within the region is markedly homogeneous. All the states, bar none, are more agricultural and less industrial than the U. S. average. Agriculture in all the states, bar none, lagged behind the U. S. populationwise during the war. And, typical of all rural regions, all the states, with the exception of Minnesota, enjoyed a better than average per capita income gains.

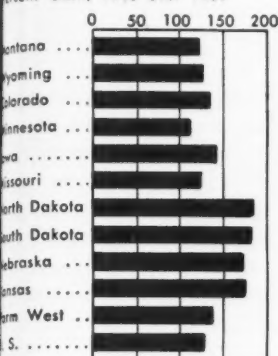
The eastern tier of states—Minnesota, Iowa, and Missouri—conforms the least to the over-all regional pattern. These states are more industrialized. Factory employment accounts for respectively 16, 13, and 20% of the total labor force, as compared with 13% for the whole region (and 25% for the U. S.). Then again, these states suffered no population losses since 1940, as did the region as a whole.

STACKING UP THE FARM WEST

A breakdown of the Farm West market and of the changes in it since before the war

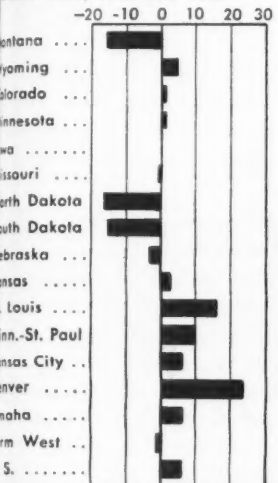
INCOME

Percent Gain, 1946 over 1939

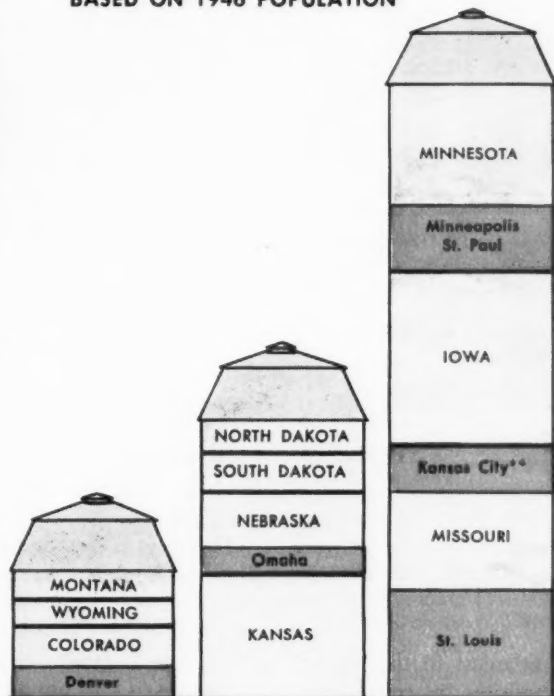


POPULATION

Percent Gain, 1946 over 1940



DISTORTION MAP
BASED ON 1946 POPULATION



*April, 1940; October, 1946
**includes Kansas City, Kan.

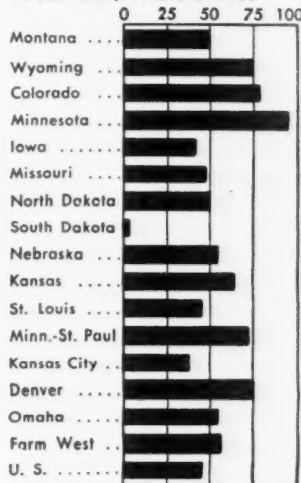
SALES

Percent Gain, 1946 over 1939



MFG. EMPLOYMENT

Percent Gain, 1946 over 1940*



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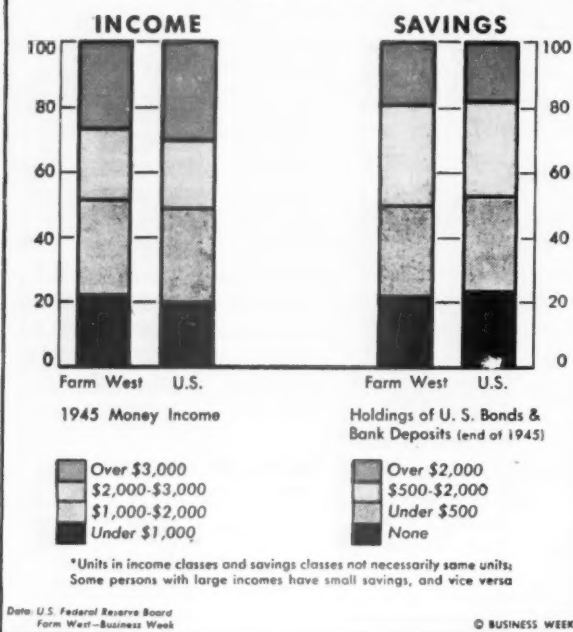
range from one state under the U.S. average to two states whose gains were twice that of the nation. Here is the state standing on this score:

	Per Capita Income		% Gain 1946 over 1939	
	In 1939	In 1946	1939	Average
Montana	515	1343	161	116
Wyoming	567	1224	116	105
Colorado	505	1163	130	100
Minnesota	497	1049	111	90
Iowa	468	1136	143	98
Missouri	486	1105	127	95
North Dakota	325	1114	242	96
South Dakota	351	1177	235	101
Nebraska	397	1120	182	96
Kansas	383	1027	168	88
Farm West	456	1108	143	95
U. S.	539	1162	116	100

Note that in 1939 only one state (Wyoming) had a larger than U.S. average per capita income. In 1946, four states were over the U.S. average. North Dakota had the greatest per capita gain, coming up from the lowest

SMALLER INCOMES, LARGER SAVINGS

Percent of all spending units,* by income and savings class



level in the region, while Kansas took the cellar position despite the fact that it had an enormous rise.

Cities of the Region

St. Louis, the city that was the largest in the region before the war, easily held its position by continuing its long-time steady growth. Its population increase was not phenomenal by any means. But the expanded number mainly reflected an enlargement of the city's manufacturing activity.

Shoes (International and Brown), chemicals (Monsanto and Mallinckrodt), stoves (American, Charter Oak, and Wrought Iron Range), and electrical equipment (Wagner, Emerson, Knapp-Monarch) are long-established businesses accounting for the larger shares of the city's factory employees. Monsanto has a large postwar expansion program under way—only a small part of it is in St. Louis, however. American Stove is moving into an entirely new plant setup.

St. Louis still holds its position as a leading distribution center of the nation. With the possible exception though of Ely & Walker Dry Goods Co. and Shapleigh Hardware Co., the wholesale orbit of St. Louis jobbers has shrunk considerably.

Kansas City, at the other end of the state, is experiencing so much industrial growth since the war that factory floor space is the major hindrance.

The huge North American plane plant has been taken over by General Motors for use as a Buick-Oldsmobile-Pontiac assembly plant. The Pratt & Whitney plant has been partly occupied on a multiple tenancy basis.

Since V-J Day, at least 60 new businesses have been

established in Kansas City. And city boosters claim they could have had twice as many if there were suitable space to put them in.

The Midwest Research Institute is doing yeoman service there in working to develop natural resources of the area to better advantage.

Minneapolis and St. Paul have registered sizable increases in manufacturing activity although huge plants were not involved.

Indicative of the Twin Cities' growth is the apparel industry. With a "Minnesota inspired" label for common promotion, the apparel group increased employment from 7,500 to 22,500 employees in the 1940-1947 period. Gross sales advanced from \$25-million to \$135-million.

Even in this area, the trend toward decentralization is evident. Minnesota Mining & Mfg. Co. established three plants at Fairmount, Hutchinson, and Duluth when Munsingwear, Inc., has expanded into Albert Lea and Little Falls.

Wichita breathed a sigh of relief when the Coleman Co., a veteran local stove firm, took over the plant facilities of Culver Aircraft, an early postwar casualty. Other plane plants of the city continue to operate although Boeing employs only a fraction of its wartime labor force.

Des Moines has never been crowded with factories. Besides being a trading center for the state of Iowa, it has had a national reputation in the insurance and publishing fields.

That city is expanding since the war along industrial lines. Deere & Co. is converting the former Des Moines Ordnance plant into a farm equipment factory. American strong Furnace Co. will manufacture steel furnaces. The Marquette Cement Co. is expanding its operations.

Omaha is an important rail center (fourth largest in the U. S.). It is headquarters of the Union Pacific and the western divisions of the Burlington and Northern western lines.

At least half of its manufacturing is in the food field. Armour, Wilson, Cudahy, and Swift operate packing plants there and Omaha claims to make more butter than any other city in the world. The monstrous Martin Bomber plant has not been converted to peacetime production.

Although the cities show the efforts made to make the territory less dependent on agriculture, it is nevertheless true that it is still farming country.

The past, present, and future of the Farm West lie in its good earth.

REPRINTS AVAILABLE

Copies of this Report to Executives, coupled with a four-page Market Data Supplement, will be available in color reprint form in about two weeks. Single copies will be mailed to Business Week subscribers upon request without charge—to nonsubscribers for 20¢. Additional copies will be billed at the rate of 20¢ apiece. On orders of 11 or more, quantity prices will be quoted on request. Address orders for reprints to Paul Montgomery, Publisher, Business Week, 330 West 42nd Street, New York 18, N. Y.

Personal Debt Hits New Peak

Individual borrowing has risen by more than one-third since end of the war. In relation to income, it's not out of line. But increase is adding to inflationary pressure.

Business loans aren't the only type of debt to show a sharp increase at the end of the war (BW—May 3, 1947). Just as sensational, even if less sized, has been the rise in individual borrowing. Despite the record level of personal incomes, American families have been plunging themselves into debt at a pace never before

estimated by the Institute of Life Insurance show that aggregate personal debt outstanding in the country was \$45-billion on June 30, 1947. That is \$4.3-billion higher than the pre-war record of \$40.7-billion, at the end of 1929. And it represents an increase of 11.3-billion, or 33 1/3%, since the end of 1945—just 18 months back.

This sharp upswing has been entirely due to increases in two types of debt—home mortgages and consumer loans. Farm mortgages and life insurance policy loans—the other two major categories of consumer debt as designated by the institute—have remained practically unchanged (box).

Yearly, home mortgages have contributed most to the rise. At mid-year the total outstanding was an estimated \$27-billion—\$7-billion, or 35%, above the 1945 year-end level. The increase was \$4.5-billion during 1946, and \$2.5-billion in the first half of 1947.

Percentage-wise, the rise in consumer debt has been even more sensational.

In the same 18 months it increased from \$6.6-billion to \$10.9-billion, or 65%.

• **Good or Bad?**—What does this mean to the nation's economy? Is it a healthy or an unhealthy manifestation? The answers depend largely on how you look at it.

Take consumer credit. A healthy rise had been expected all along—as soon as the war was over and long-wanted consumer goods, particularly durables, started to roll off the assembly lines. And in relation to the size of total individual income (which, in the long run, determines the ability to pay off the debt), the present credit level is not out of line.

• **Ratio**—Credit is still going up. By the end of the year, it is likely to be somewhere around \$12-billion. But 1947 disposable personal income (aggregate individual income after income-tax payments) will be about \$170-billion. So the ratio of consumer credit outstanding to disposable income will be only about 7%. In 1929 that ratio was 9.2% and from 1936 to 1941 the range was between 10% and 12%.

In other words, the national economy has grown tremendously. Thus, the mere size of one of its components shouldn't be considered a danger.

• **Inflation**—Nonetheless, there are some disturbing implications in the current debt situation. One such is its impact on the inflation picture.

Among the causes of zooming prices,

Income Zooms—But So Does Borrowing

(All figures in billions of dollars)

	Disposable Personal Income	Personal Debt Outstanding—				Total
		Home Mortgages	Farm Mortgages	Consumer Credit	Life Policy Loans	
1929	\$82.5	\$21.1	\$9.6	\$7.6	\$2.4	\$40.7
1930	45.2	17.9	7.7	3.9	3.8	33.3
1931	70.2	18.2	6.6	8.0	3.2	36.0
1932	75.7	19.1	6.5	9.2	3.1	37.9
1933	92.0	20.1	6.5	9.9	2.9	39.4
1934	116.2	19.9	6.1	6.5	2.7	35.2
1935	131.6	19.6	5.6	5.3	2.4	32.9
1936	146.0	19.5	5.3	5.8	2.1	32.7
1937	150.7	20.0	5.1	6.6	2.0	33.7
1938	158.4	\$24.6	\$5.2	\$10.1	\$1.9	\$41.8
1939	\$169.6	\$27.0	**	\$10.9	\$1.9	\$45.0

* Estimated. ** Estimated annual total based on first-half rate. *** Midyear estimate not available. Includes farm-mortgage debt taken at 1946 year-end figure. Data: Federal Home Loan Bank System; Agriculture and Commerce Depts.; Federal Reserve Board; Institute of Life Insurance.



Mail vs. Female

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How to scrape up a million dollars—

THERE is one highly mechanized operation that actually scrapes wealth from the ground. It is called "strip" mining—a fast, efficient method of recovering coal deposits lying in seams just under the earth's surface.

Unlike deep shaft mining, the seams of strippable coal are naturally shallow. The life of a good strip mine may be as short as 8 or 10 years.

This was precisely the problem facing the Ayrshire Collieries Corporation of Indianapolis when they came to the Bank of Manhattan in 1940. Some of the surface mines which the firm had in operation were nearing exhaustion.

Ayrshire had already taken an option on a new strip coal field which they called "Flamingo." Surveys indi-

cated a rich deposit here. But working capital was needed for building roads and railroad yards, for costly machinery and equipment.

The Bank's officers studied the problem and Ayrshire's record of operation. They were impressed by the ability and foresight of the firm's management. The Bank advanced the money that was needed to open and develop the Flamingo mine. In five short years, Flamingo has earned over a million dollars. Today, Ayrshire has adequate coal reserves for still further development.

This is typical of the experience of many forward-looking companies who come to the Bank of Manhattan for counsel and financial help at critical crossroads in their development.



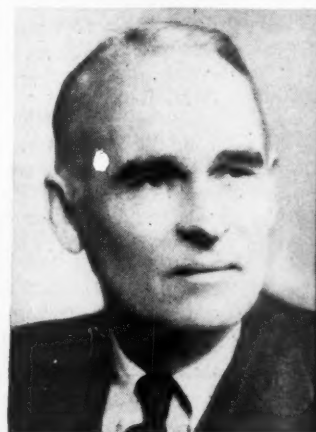
Bank of the Manhattan Company
NEW YORK

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

the twin facts of record income and continued scarcity of goods rank high. Increase in consumer borrowing can be regarded as additional consumer income so far as it further intensifies the competition for available commodities. This situation may become worse with federal curbs on installment buying on Nov. 1 (BW—Aug. 16 '47, p. 64). Many authorities think this date will be a signal for a new jump in credit buying (some business quarters, in fact, appear to be almost counting on just such an occurrence).

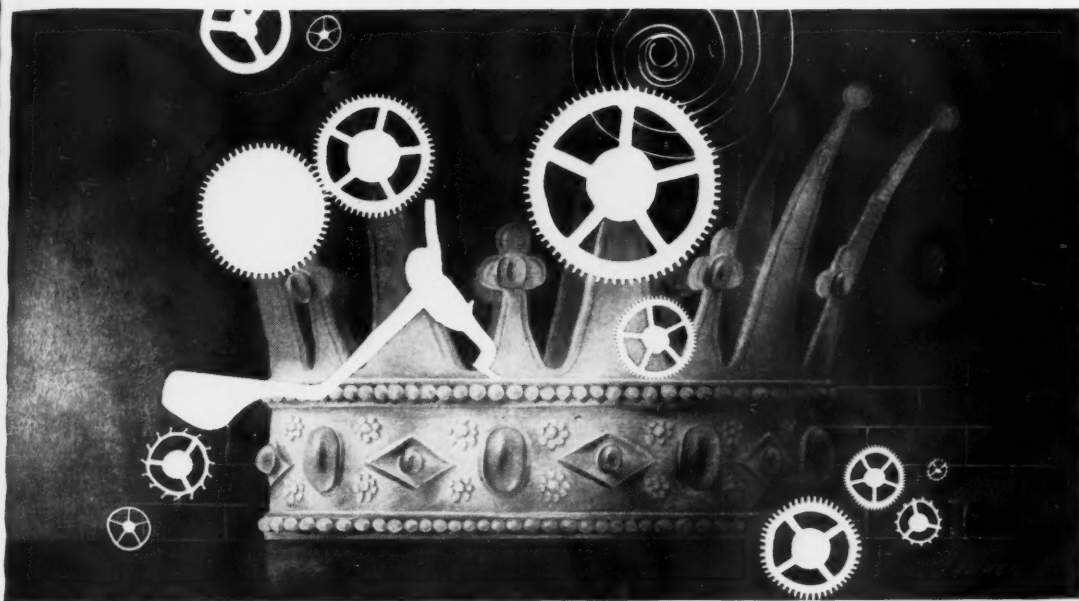
• **Trouble Brewing**—Viewed in this light, the increase in borrowing suggests plenty of headaches ahead—for the borrowers and for businessmen who have extended them the credit. And the headaches will be considerably worse if the country should slide into the recession that has been so often predicted for next year.

Another disturbing factor is the one revealed in the recent Federal Reserve Board survey of consumer finances, that about 25% of the nation's families spent more than they made last year (BW—Aug. 23 '47, p. 34). Many of these contributed to the increase in debt. If prices continue to rise, thus keeping these families from balancing their budgets, how will they be able to pay off this indebtedness?



TOP MAN IN SHIFT

Sharp & Dohme, Inc., has shifted its top lineup to get ready for further expansion. John S. Zinsser (above) moved from the presidency to fill the vacant post of board chairman. William L. Dempsey, former executive vice-president, became president, and Dr. William A. Feirer, formerly vice-president, succeeded Dempsey. Chairman Zinsser, who has been with the company since 1935, continues as chief executive.



Here's the Works on the biggest advertising news in years!

Commencing in March, space will be available in CORONET to a limited number of advertisers. Because the full story represents a development of major importance, here's the works on CORONET:

Q: How do CORONET's rates compare with those of other magazines? A: 22% below the lowest in the multi-million class, and 34% below the average for the top 9 magazines.

Q: What does this mean specifically? A: For roughly the cost of 3 pages in LIFE (guaranteeing 15,600,000 reproductions) or 3¾ pages in LADIES' HOME JOURNAL (16,875,000) or 4½ pages in SATURDAY EVENING POST (16,470,000) thirteen pages can be had in CORONET, with 26,000,000 reproductions!

Q: Does CORONET guarantee 2,000,000? A: Yes. However, during the first eight months of 1947 an average of 2,319,688 copies were delivered.

Q: Who are the readers, and what kind of a market are they? A: Readership is family-wide — in the top-intelligence levels—and CORONET families aggregate a total population exceeding New York City's.

Q: How thoroughly do they read CORONET? A: Four traffic surveys show that the difference in readership between the lead-off article and the last article in the magazine is only 16%!

Q: What is CORONET's advertising policy? A: Every advertisement facing an editorial page, and a set policy of two or more pages of editorial per page of advertising.

Q: Does this limit the number of advertisers? A: Yes. Of the 4,180 nationally advertised products and services, there will be space in CORONET for only about 50.

Q: What will be the advantages to advertisers of this policy of limitation? A: Preferred positions for all, drastically-reduced competition, and a readership for advertising that will more closely approach that of the magazine itself.

It's the number of actual readers an advertisement gets that the advertiser pays for — not the magazine's circulation.

CORONET's unique policy is the first important move that has been made to attack this unknown factor of waste!

Coronet

2,000,000 GUARANTEED CIRCULATION

NEW YORK . 366 Madison Avenue
Murray Hill 2-5400

CHICAGO . . . Coronet Building
Dearborn 7676

DETROIT . . . 417 New Center Bldg.
Madison 5745

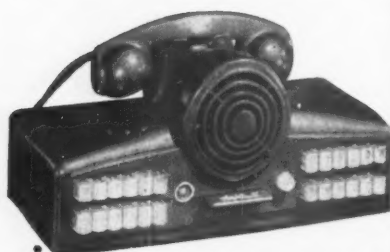
PHILADELPHIA . 1700 Walnut Street
Pennypacker 5-8998

BOSTON 525 Statler Office Bldg.
Liberty 5526

LOS ANGELES . . 448 South Hill Street
Trinity 9924



Have Better Business Days



WITH THE NEW

AMPLICALL
ELECTRONIC
INTERCOMMUNICATION

America's Most Wanted Business Communication Systems

You'll have better business days with the New AMPLICALL! You'll get more done in less time, with less effort, confusion and delay. AMPLICALL electronic communication, with its exclusive new features, is the modern fast-action way to ease up the work load—to step up office and plant efficiency. Just the touch of a button gives you instant speaking contact with any or all of your key men. All communication—within and between departments—is sped quickly, simply, dependably over the AMPLICALL electronic network. For better, more productive business days, let AMPLICALL go to work for you...



There is an AMPLICALL System available to fit the special needs of your business. Write today for information on America's finest Business Communication Systems.

Rauland

THE RAULAND CORPORATION

4249 N. Knox Ave., Chicago 41, Illinois

☐ Send complete details on the New AMPLICALL.

☐ Send your representative. No obligation.

Name.....

Company.....

Address.....

City.....State.....

Dominion Crisis

Canada denies rumors it will devalue its currency. But it must take some action to stop the drain on U. S. dollar reserves.

OTTAWA—In London last week, Canada's youthful Finance Minister, Douglas C. Abbott, took time off from his trade talks with the British to deny once again that his Dominion is on the verge of devaluating its dollar.

• **Dollar Shortage**—Despite his denial, however, devaluation talk persists in well-informed circles. For Canada must soon face up to the dollar famine that plagues almost every other nation. A return to the wartime rate of 90¢ to the U. S. dollar may well be the way for Ottawa to get out from under. This would at once increase Canadian exports and cut imports from the U. S. Major drawback to the device is its

inherent political risk—for devaluation could send domestic prices skyrocketing. Yet the U. S. would probably get a dim view of the major alteration of the imposition of tight controls on U. S. imports except bare necessities. • **Alternatives**—There are still other possibilities. These include: (1) floating a U. S. loan; (2) lifting food embargo so that Canadian producers can sell more at the high prices the U. S. pays; or (3) persuading the U. S. to reduce tariffs to admit more Canadian goods. Best guess is that the final action will embody several of these possibilities—and that it will be a heavy blow to Canadian business.

Just how soon Canada will run out of U. S. dollars is problematical, the exact amount of its current dollar reserves remains a secret. Last year, however, Canada wound up with \$14-billion in gold and dollars, a 10% increase over its prewar holdings of \$400-million.

• **Big Deficit**—But the outgo has increased heavily. Annual imports for

Retailers' Earnings Drop Sharply

Profit reports from retail stores and mail-order houses point up an all-too-apparent fact: Boomtime earnings are shortlived, once the boom's generating forces start to peter out. As indicated in the tabulation below, earnings of most retail stores dropped sharply from last year's high levels—despite the fact total sales in many cases were up.

• **Ills and Remedies**—The start of the retail trade's troubles came late in 1946. At that time, most merchandisers began to feel uncomfortable because of (1) large inventories; (2) their heavy outstanding orders for new goods; (3) more and more consumer resistance to higher prices.

To correct this situation, the trade

took immediate steps to slice inventories by mark-down sales. Outstanding orders were also sharply cut. By mid-1947, the ills had been pretty well remedied.

But the costs of the medicines came high.

• **Comparison**—Retailers' last-half operating reports may reveal a better 1946-1947 comparative showing than those of this year's first six months. But full year profits will undoubtedly stay behind those of 1946.

The tally below covers major retailers who had reported by this week. Some of the biggest earners in the field—Gimbels, Macy's, Federated Dept. Stores—have not yet reported. Figures are in thousands of dollars.

	Sales		Profits			
	First Half	1947	First Quarter	1947	Second Quarter	1947
	1946	1947	1946	1947	1946	1947
Department Stores						
Allied Stores.....	\$875,815	\$86,727	\$5,361	\$3,067	N.A.	N.A.
Assoc. Dry Goods.....	61,964	62,229	N.A.	N.A.	\$4,030	\$1,360
City Stores.....	59,355	67,434	1,282	1,272	1,178	532
Interstate Dept. Stores...	23,379	28,180	N.A.	N.A.	\$776	\$315
Marshall Field.....	88,674	95,757	3,210	2,562	3,876	2,243
May Dept. Stores.....	121,540	158,717	N.A.	N.A.	\$8,927	\$7,022
Mercantile Stores.....	44,889	50,114	N.A.	N.A.	\$3,242	\$1,410
Nat'l Dept. Stores.....	39,167	40,071	N.A.	N.A.	\$2,058	\$1,202
J. C. Penney.....	284,301	322,061	N.A.	N.A.	\$17,883	\$10,941
Mail Order						
Aldens, Inc.....	30,156	35,753	473	289	295	D76
Montgomery Ward.....	418,397	508,648	N.A.	N.A.	\$24,559	\$17,624
Sears, Roebuck.....	638,909	790,869	N.A.	N.A.	\$38,640	\$40,355
Speigel, Inc.....	44,714	57,299	N.A.	N.A.	\$1,126	\$174
Specialty Stores						
Best & Co.....	18,108	17,120	N.A.	N.A.	\$1,800	\$925
Hoving Corp.....	N.A.	N.A.	N.A.	185	N.A.	D11
Lane Bryant.....	22,848	26,008	503	70	328	D12
Lerner Stores.....	47,046	50,441	N.A.	N.A.	\$2,477	\$1,876

N.A. Not available. # First quarter only. * Six-month results. D Deficit.

Now... PURITY Comes in Carloads

For the first time, sorbitol is available in carloads—with a new concept of purity—for new uses and new thinking.

Where once it was tons, now it is carloads. Greatly expanded production facilities—just completed—have opened fresh vistas for the chemical industry, and suggest new evaluation of this remarkable chemical.

Sorbitol, a hexahydric alcohol, may be used advantageously

—As a Manufacturing Ingredient in

DRYING OILS	ESTERS
HARD RESINS	ETHERS
ALKYDS	PLASTICIZERS

—As a Conditioning Agent and Humectant in

COSMETICS	GELATIN	GASKETS
FLEXIBLE GLUES	CHEWING GUM	POLISHES
LEATHER	CANDY	YEAST
PAPER	TOBACCO	SOFT DRINKS
PHARMACEUTICALS	PRINTERS' ROLLERS	

Available in Two Grades... in Drums or Tankcars

SORBO

A 70% aqueous solution of D-sorbitol. Water-white, with clean, sweet taste. No odor. For synthesis and moisture-conditioning. By improved technique, this grade is now offered in greater purity than ever before.

ARLEX

Atlas commercial sorbitol solution, containing closely related polyhydric materials which make it non-crystallizing. For flexibilizing and moisture-conditioning.

The Atlas technical staff is especially qualified to discuss sorbitol applications with you. Bring your problems to us.

Arlex—Reg. U. S. Pat. Off.



ATLAS

POWDER COMPANY
WILMINGTON 99, DELAWARE
Offices in Principal Cities

Industrial Explosives • Industrial Finishes • Coated Fabrics • Acids
Activated Carbons • Industrial Chemicals



ON PAINT MAINTENANCE WITH
RIGIDSTEEL TRUSSLESS CONSTRUCTION

Make sure your new industrial building actually pays its way for life! When you specify RIGIDSTEEL Trussless Construction, you get sound modern design, more usable space, clear overhead and sturdier roof members to support tramways or hoists. There is less surface to paint in RIGIDSTEEL Construction and the cost per ton is lower. Overall maintenance for RIGIDSTEEL buildings can be kept at a minimum *for life*. Get the facts before you build. Write . . .



IN 1946

This magazine carried more pages of business-goods and services advertising, than any other general-business magazine or national news-weekly.

BUSINESS WEEK	3237.43	Pages
Magazine B	1795.37	"
" C	1690.69	"
" D	1330.94	"
" E	1320.63	"
" F	482.67	"
" G	312.30	"

(FROM PUBLISHERS INFORMATION BUREAU
ANALYSIS OF ADVERTISING—1946)

Wherever you find it, you find a management-man . . . well informed.

the U.S. jumped from a 1956-58 age of \$450-million to a rate of more than \$2-billion during the first half of 1947. Trade deficit with the U.S. this year may reach \$975-million.

In normal times Canada's position would be perfectly sound. Historically the balance of trade has been in favor of the U.S. but in days of free convertibility of exchange, Canada earned enough from exports to Britain and other tries to make up the difference.

Now Canada is caught in a soap play. It is paying its chief source (U.S.) abnormally inflated, cash-barrelhead prices. But Britain has settling its trade deficit with Canada by paying only 50% in dollars (the U.S. loan) and drawing from \$1-billion loan from Canada to top the other 50%.

• **Must Do Something**—The U.S. dollars Canada gets from Britain by arrangement don't even come close to covering the \$1-billion-a-year trade deficit with the U.S. So it's a cinch the Canadian government is going to do something.

today I decided to be a teacher—

Sponsored by (NAME OF SPONSOR)

PEDAGOGICAL PLUG

One of the oldest and most valuable of U.S. commodities—education—has a new sponsor. Business, under the impetus of the Advertising Council, is putting on a campaign to promote better teachers, better schools. Posters and other advertising material are a whole campaign "guide"—has been prepared by Benton & Bowles advertising agency; top industrialists, advertising men and educators launched the program last week in New York.

The council stresses that more business spends on education pay off—in higher living standards, hence a larger market.

Available now

THREE-BURNER UNIT CHANNEL-TYPE CARBON BLACK PLANT

Seagraves, Gaines County, Texas.

FOR SALE OR LEASE

- 1 As a whole, for operation at present site;
- 2 As a whole, less one or two burner units and appropriate accessory buildings and equipment for operation at present site, or—

FOR SALE

- 3 As a whole, except dwellings*, for dismantling and removal from site;
- 4 One or two burner units only and their appropriate accessory buildings and equipment for dismantling and removal from site.

*Dwellings to be offered separately, if remainder of Plancor is sold for removal from site.

DESIGNED CAPACITY: Approximately 13,000,000 pounds.

BUILDINGS AND FACILITIES: Gas Desulphurization (Treater) Plant, designed capacity—21 million cubic feet of gas per day. Gas Supply Line. Carbon Black Plant—Three Burner Units, each consisting of 60 Burner Houses, 12' x 116' x 9'. Processing, storage and miscellaneous accessory buildings and equipment. Dwellings—4 at Treater Plant site and 15 near Carbon Black Plant site.

DELIVERY STATUS: Currently, this facility is being operated by Columbian Carbon Company under an interim lease cancelable on 30 days' notice.

GAS SUPPLIES: Gas for the production of channel black is now being supplied by Phillips Petroleum Company and, in part, by an affiliate of the present lessee, Columbian Carbon Company. The contract with Phillips Petroleum Company extends through 1949 and is transferable with the Plancor. Columbian Carbon Company has expressed willingness to nego-

tiate with prospective operators of the plant for such small additional supplies of gas as the company may have over and above its own needs.

War Assets Administration invites proposals for the purchase or lease of Plancor 2316, currently being operated by Columbian Carbon Company at Seagraves, Gaines County, Texas.

SEALED BIDS: Your sealed proposals on Standard Bid Forms will be received by War Assets Administration, Office of Real Property Disposal, North American Aviation Plant, Grand Prairie, Texas, until 2:00 P.M., C.S.T., November 5, 1947, at which time all proposals will be publicly opened and read. Credit terms may be arranged. War Assets Administration reserves the right to reject any or all proposals. For a more detailed description of this property and for Standard Bid Forms write:

WAR ASSETS ADMINISTRATION
OFFICE OF REAL PROPERTY DISPOSAL

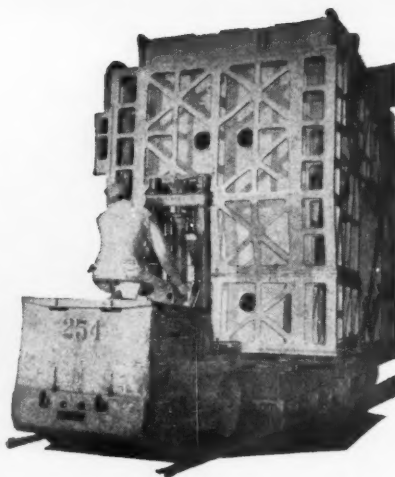
NORTH AMERICAN AVIATION PLANT, GRAND PRAIRIE, TEXAS



1350-T

They go almost ANYWHERE

One of the unconventional but useful handling jobs often performed by battery industrial trucks is to push or pull heavy loads between cranes. Articles describing modern methods of material handling appear regularly in our **STORAGE BATTERY POWER**. Send for sample copy if you do not already receive it.



BECAUSE they are quiet and free from fumes, battery industrial trucks can be used without restriction in virtually any department of the plant. They can even be provided with spark-enclosed construction for operation in locations where fire and explosion hazards may exist.

They use low-cost electric power and they use it with maximum economy, because they start instantly, yet consume no power during stops. With electric motor drive for both traction and lifting, they have a minimum of wearing parts; are easy to maintain; are rarely out of service for repairs.

Thus, they are inherently dependable and economical, and this is especially important where they are working twenty four hours a day. Here they have the additional advantage of operating from one battery while another is on charge; except for the few minutes needed to exchange batteries, they need not stop for servicing of the power unit.

They are extra dependable and extra economical when **EDISON Nickel-Iron-Alkaline Batteries** are used. With steel cell construction, a solution which is a natural preservative of steel, and a fool-proof principle of operation, they are the longest-lived and most durable of all storage batteries. *Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, New Jersey. In Canada: International Equipment Company, Limited, Montreal and Toronto.*



EDISON

Nickel • Iron • Alkaline
STORAGE BATTERIES



IN INDUSTRIAL TRUCKS, EDISON NICKEL-IRON-ALKALINE BATTERIES GIVE YOU THESE IMPORTANT ADVANTAGES

They are durable mechanically; they can be charged rapidly; they withstand temperature extremes; they are foolproof electrically; they can stand idle indefinitely without injury; they are simple and easy to maintain.

C.&O.—Central Decision Now in ICC's Hands

The Interstate Commerce Commission last week wound up its hearing on the proposed marriage of the Chesapeake & Ohio Ry. and New York Central R.R. (BW-M '47,p70). For better or for worse, the decision was now up to ICC to decide whether to approve the merger.

• **Would-be suitor** Robert R. Young could vote his 400,000 shares of C. O.-owned Central stock.

• **Young and C. & O. president** Robert J. Bowman can sit on Central's board. ICC's decision is expected around the turn of the year.

• **Affirmative**—As with most marriages of such a nature, the hearings brought out that there was little mutual attraction between the two parties. Young spiced his testimony with his diatribe against the "few top bankers who control the nation's leading firms—including Central."

"Our very presence" on Central's board "would relieve" that road banking control, he asserted. And predicted, it would also have other effects: for example, better treatment for Central's customers; more and faster passenger trains and faster freight trains; and motive power that would "make the diesel locomotive obsolete."

Seating Young and Bowman on Central's board, other C. & O. executives testified, would immediately raise Central's credit rating. This would enable the road to refund its debt soon to interest, they said, and free for constructive transportation uses some \$10-million of its quick assets. They promised early benefits to Central traffic as a result of C. & O.'s expanding coal business (the two roads will interchange freight).

• **Negative**—But the opposition (mainly the Virginian Ry., anti-Young interest in the Nickel Plate Road, the city of Norfolk, and two Central officials unexpectedly called on by the Virginian) was lined up, too. The general sentiment from this quarter: C. & O. officials sitting on the Central's board might cause some devastating repercussions.

A Central-C. & O. tie-up, the Virginian insisted, might break up its and close traffic arrangements with Central. Such action might divert from Virginian as much as \$10-million, 29% of annual freight revenues.

• **Central's Position**—The Central officials strongly intimated that Young Bowman had been invited to join Central's directorate only because they resented 6% of its stock. They had intentions of arranging a "trial marriage."

LABOR

How Can Output Be Boosted?

American Management Assn. finds employers disagree widely on means of increasing workers' productivity. Many skeptical at letting employees shape plans, but some let them have a say.

As old as any labor problem and as next quarter's balance sheet, productivity never gets far from top item in management's thinking about employees. No wage is too high if output is forthcoming. No wage is too low if the production isn't there. Unit cost is the only measurement of management which can make sense in a profit system.

The widespread recognition of this gives interest to anything that can provide new insights into the problem of raising productivity. It assures a big attentive audience for the results of current study which promises to be one of the most extensive ever undertaken on employee productivity.

In the Making—This survey was started 18 months ago by research technicians of the American Management Assn. Under its president, Alvin A. Dodd, this group had long felt there was a need for such a study. It is now scheduled for completion early in January. But byproducts of it will be discussed at the A.M.A.'s Personnel Conference to be held in New York City at 2 and 3.

A.M.A.'s study was prompted by a recognition that adequate research had never been made into the field of man-

agement-labor cooperation to increase productivity. A.M.A. undertook to find out what types of employee cooperation plans have been used, the results accomplished, and reasons for their success or failure.

• **Points of Emphasis**—Researchers were instructed to give special emphasis to:

(1) Unusual or especially successful methods used by management to get cooperation from their employees.

(2) Important ways that unions have helped boost productivity.

(3) Future plans which companies have for raising workers' output.

The approach was entirely objective, but there were two important basic concepts: The national economy can best be served by increasing the size of the whole profit-pie, to avert haggling over the size of the slices; employee participation in planning to this end has had a successful background abroad—where it has been lacking, labor has substituted political expedience.

A.M.A. made preliminary studies, then launched a survey with questionnaires to 1,000 companies. They were asked what employees were doing to:

(1) improve job responsibilities and to set job standards; (2) boost safety and accident prevention; (3) reduce waste and spoilage; (4) introduce technological changes. Other questions dealt with suggestion-box techniques, and with company communications programs.

• **Field Survey**—Questionnaires were followed up with a two-month field survey of 40 companies. Field work included interviews with top- and lower-level management, union representatives, and production workers. Results now are being tied together, will soon be turned over to a panel of professional labor relations men for analysis. A.M.A.'s final report will reflect their recommendations.

Meanwhile, A.M.A. researchers have turned in some advance findings:

• Many employers are still skeptical about letting employees have a hand in any phase of management. In most of these cases, the attitude can be traced to an unfavorable past experience with unions.

• Many others started out with the simplest form of employee participation, that aimed at safety methods. Success-



*Plater's
Supplies*

Tested for Quality

SOLD AT REGULAR MARKET PRICES

Udylite carries one of the largest stocks of plating and finishing supplies in the country—ready for immediate shipment—sold at regular market prices.

And, every item in the stock has been tested for quality in Udylite laboratories. Only materials which meet our rigid specifications are accepted in our warehouse.

Without paying any more for his supplies, the Udylite user obtains the benefit of expert, experienced laboratory control of quality. He is assured that what he buys at Udylite will be the best obtainable—exactly meeting specifications. This is a Udylite extra service well worth having.

Udylite

**THE
UDYLITE CORPORATION**

DETROIT 11, MICHIGAN

REPRESENTED IN PRINCIPAL CITIES



CONFERENCE HEAD: Alvin A. Dodd, heads a personnel study group next month.

What makes a

(A Question Advertisers have been trying to Answer for Years)



1. As every advertiser knows, there are upwards of 40 million families in this country. Through the use of enough media, it is possible to reach all these families at one time. But as every advertiser *also* knows, this would not mean all would buy. *Why?*



2. Is it a matter of buying power? Buying power is important—but it is not enough. It has to be backed by buying desire or it is useless. And—as every advertiser knows—you —it was not necessarily the wealthy who bought the first radios, the first electric refrigerators.



3. For the answer, watch any really new product come on the market. A dishwasher. Television. A home freezer. At first, most people—regardless of income—are cautious. They want to “wait and see.” They prefer to have somebody else do the pioneering.



4. So new products move slowly until the early-buyers spread the word. These people who start buying waves are generally the *intellectually curious*—the folks whose hunger for facts and ability to assimilate information cause them to seek and try the newest and best products.

a person want to buy?

A QUICK SUMMARY OF FACTS

TOTAL CIRCULATION:
485,000

READERSHIP BY SEX:
62% men—38% women

GUARANTEED: 400,000

HOME-OWNERS: 58%

READERS PER COPY: 2.6

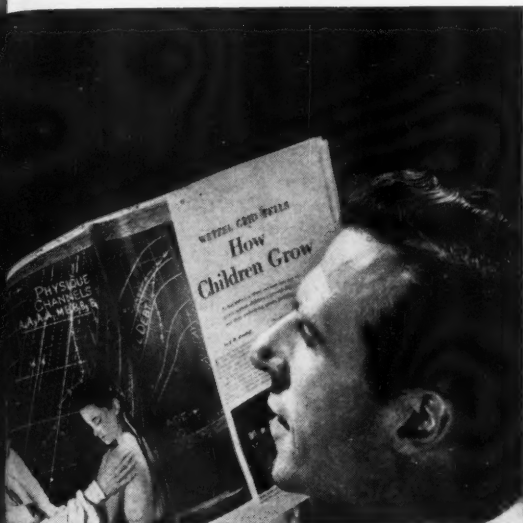
COLLEGE EDUCATED: 52%

TOTAL MONTHLY AUDIENCE:
1,000,000 plus

LIFE INSURANCE
OWNERS: 91%
(Against a national average
of 50%)

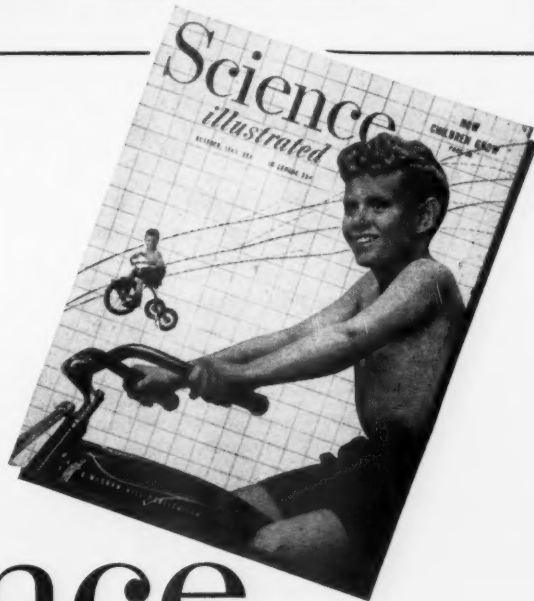
NEWSSTAND: 35%

A McGraw-Hill Publication



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read SCIENCE Illustrated. But you can feed them
facts about your product and keep them more interested
you can just a general type of audience. In short, if
looking for sales, don't overlook SCIENCE Illus-
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☐ EXECUTIVE THINKING AND ACTION

By Fred DeArmond. This unique book shows you how to apply tested, basic leadership techniques to all types of business situations. It demonstrates, with scores of illustrative examples, the methods and practices employed by outstanding leaders in the fields of business, government, and the military. 251 pages, 5½ x 8, \$3.00.

☐ BLUEPRINT FOR PUBLIC RELATIONS

By D. H. Plackard and C. Blackmon. Here is expert counsel to help you make sure of building good will and understanding with your public relations campaign. This book details the successful methods, functions, and techniques that aid you in molding public opinion in your favor. 355 pages, 5½ x 8, \$3.50.

☐ REBUILDING THE SALES STAFF

By Saul Pollak. This book takes a long step toward helping you solve the twin problems of salesmen selection and training. It takes the guesswork out of recruiting and selection—analyzes every phase involved in the step-by-step development of a sound, effective training program. 593 pages, 6 x 9, \$4.00.

☐ RECORDS MANAGEMENT AND FILING OPERATIONS

By Margaret Odell and Earl Strong. Now—you can make your filing a better business tool. This new manual shows you how to set up and operate a filing system that exactly suits your individual business needs. It emphasizes the necessity for, and development of, centralized record control. 342 pages, 6 x 9, illustrated, \$4.00.

☐ PRINCIPLES OF COLOR AND COLOR MIXING

By J. H. Rustanoby. This practical guide shows you how to select, match, mix and use coloring materials more scientifically. It contains 242 formulas for mixing today's most popular hues, tints, tones and shades. It includes the author's own system of "instant" color identification. 130 pages, 7¼ x 9¾, illustrated, \$4.50.

MAIL THIS ON-APPROVAL COUPON

McGraw-Hill Book Co., 330 W. 42nd St., N.Y.C. 18

Send me the books checked below for 10 days' examination on approval. In 10 days I will pay for the books, plus five cents postage, or return them postpaid. (We pay postage on cash orders.)

- ☐ DeArmond's Executive Thinking and Action—\$3.00
☐ Plackard and Blackmon's Blueprint for Public Relations—\$3.50
☐ Pollak's Rebuilding the Sales Staff—\$4.00
☐ Odell and Strong's Records Management and Filing Operations—\$4.00
☐ Rustanoby's Principles of Color and Color Mixing—\$4.50

Name

Address

City and State

Company

Position

Postpaid

(For Canadian price write McGraw-Hill Co. of Canada, Ltd., 12 Richmond Street E., Toronto 1.)

ful in labor-management committee work toward that goal, they have extended their cooperative program to cover other objectives. Safety cooperation thus has been a testing ground for greater employee participation in management.

• A few have started out with a sweeping program giving employees a broad voice in planning to boost productivity. In many instances, these programs have been linked closely with profit-sharing plans.

• Needs and Sentiments—Other interim findings:

Many companies with formal programs for increasing employee cooperation stress the need for (1) asking employees' advice and criticism, rather than letting them make final decisions; (2) avoiding collective bargaining issues in labor-management cooperation meetings; and (3) backing programs with top-management support.

Many companies felt that inducements should be given to employees to increase productivity. Many stressed

bonus plans—especially those group bonuses—while others expressed preference for suggestion systems and nonfinancial incentives.

• Yes and No—Fifty-six companies with plans reported cooperation of employees was "better than ever" as a result. 28 said there had been no marked change. Two even reported less cooperation. Showing the marked differences were in management thinking, 28 companies said stricter discipline would boost productivity more than employee consultation; 26 said their unions had contributed in any way toward better productivity; 12 were doubtful about the value of the union contribution and eight companies said that they reached the limit of cooperation with their unions.

On the other hand, 46 companies warned against use of discipline to boost productivity; 45 said unions had made a "constructive contribution" to higher productivity; and 79 said the limit of labor-management cooperation to boost productivity had not yet been reached.

Labor Arbitrators Organize

Umpires set up National Academy of Arbitrators to develop rules of professional conduct, foster standards of membership, hence keep integrity intact. But it won't be a closed shop.

Some 20 of the nation's top-flight labor arbitrators met in Chicago last week to establish and christen a brand-new organization in their field. Its name: the National Academy of Arbitrators. Its purpose: to foster higher standards of integrity and competence in their profession. To help reach their target, the arbitrators are adopting canons of ethics to govern their conduct.

• Need—The idea which is about to bear fruit is not new. For years, when arbitrators got together they entertained each other with accounts of how greedy or unprincipled some other arbitrators were. The higher types of men practicing arbitration have long realized that their profession could be discredited by some of the shadier practitioners. The big growth in the field has increased this danger.

The National Academy developed out of a discussion that took place in Washington last year. At that time, a number of well-known arbitrators were in the capital to consult with officials of the Conciliation Service. After finishing their business meeting with Edgar Warren, who was then Director of Conciliation, they sat around for a little shop talk. As a result of that session the arbitrators resolved to get on with the job of starting a professional association.

• Laws and Officers—The meeting in Chicago polished off the formalities of

a constitution, bylaws, and temporary officers, who include:

President—Ralph Seward, impartial umpire under the U. S. Steel Corp. C.I.O. contract (BW—Aug. 23 '47, p. 10).

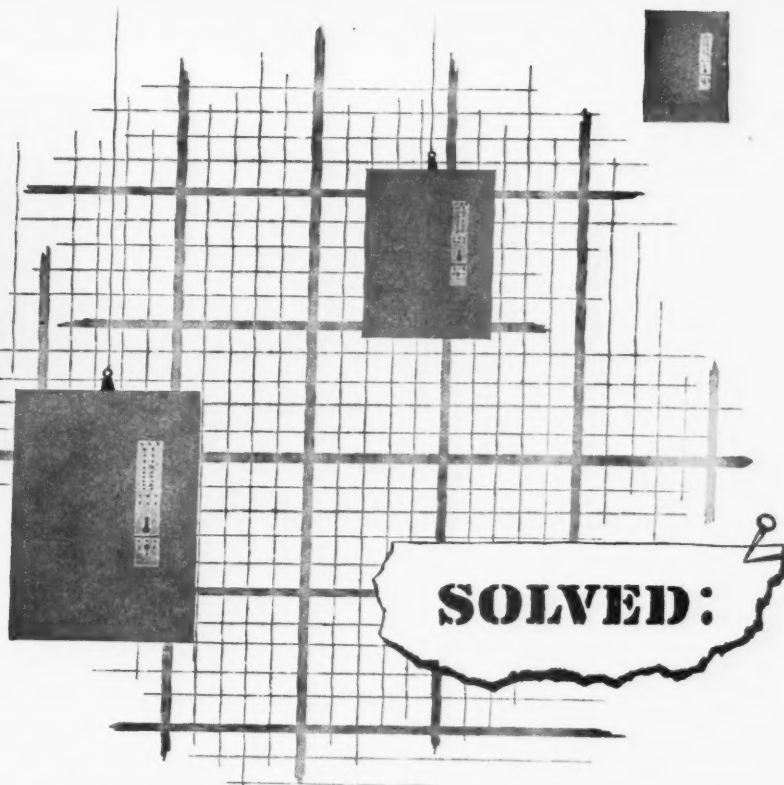
Vice-presidents—Clark Kerr, umpire under the West Coast waterfront contract; Whitley McCoy, professor of law at the University of Alabama; and William Simkin, arbitrator in the hotel industry.

Secretary-treasurer—Peter Kelliher, impartial umpire under the International Harvester Co. labor contract.

Among the 11 members of the academy's board of governors are: Lloyd Garrison, former chairman of the National War Labor Board; Harry Schulman, Ford-C.I.O. umpire; Aaron Horowitz, Lever Bros. umpire; Willard Wirts, former chairman of the National War Stabilization Board; and Warren.

• Membership—The Chicago discussions envisioned a total academy membership ranging between 100 and 300. The membership committee was authorized to admit up to 40 before the next meeting, scheduled for February.

Everyone involved agreed that the new association faces a delicate problem: how to define standards for membership and rules of conduct for arbitrators that will keep the profession pure. If the arbitrators can make a contribution in this direction the



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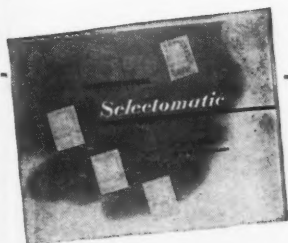
establishes fully automatic patterns of operation that solve the three major types of elevator demand—up peak, down peak, and off peak traffic. Each elevator car is given "eyes" to see the demand for service and answer it promptly—not only at five o'clock, but all through the day.

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count on the support of both management and labor. If, however, the academy develops into an instrument for protecting the job rights of the elect and closing the arbitration field to other honest and competent men, it will defeat its announced purpose.

But the founders do not envision a closed shop in the field of labor arbitration from which nonmembers of their new National Academy of Arbitrators will be barred.

Canadian Law?

Meat strike points up need for government intervention in national disputes. Demand rises for broad labor legislation.

Sentiment is growing in Canada in favor of broad labor legislation. Much of the pressure is due to a month-old strike of 12,000 C.I.O. packinghouse workers against three major companies. Slaughtering is halted in 21 plants of the Swift Canadian Co., Canada Packers, Ltd., and Burns & Co. About 75% of Canada's normal meat supplies are cut off, as only small independent plants continue operating.

• **Wage Issue**—Behind the strike is a contract dispute, based primarily on a wage issue. The union demanded a 17¢ hourly wage increase, with a 92¢ base rate. Swift offered 3¢ an hour, and the other companies 5¢ an hour. The immediate spark that set off the stoppage was Swift's dismissal of 26 unionists, allegedly for slowdown tactics. Other employees walked out at Swift plants Aug. 27, and the strike spread to the other companies two weeks later.

As the strike spread, so did its significance to Canadian labor generally:

- A prolonged tie-up may force reconsideration of present policy of allowing provincial autonomy in labor jurisdiction.
- The walkout, with its attendant pinch on food supplies, is considered a certain incentive for labor legislation at the next session of Parliament.
- **Power Lacking**—The legislation issue was brought into sharp focus last week when the union sought to force appointment of a government conciliator to seek a settlement on a nationwide basis. But due to the lapse of the Canadian government's wartime regulations, the government at Ottawa no longer can take automatic jurisdiction in the packing industry on a national scale. Jurisdiction rests with the provincial governments until it is waived. Only three of the eight provinces in which struck plants are located responded favorably to the union's appeal to allow nationwide conciliation.



Abraham A. Desser

ARBITRATOR

The practice of writing arbitration clauses into collective bargaining contracts has grown fast for several years. Result has been a sharp increase in the case load of the American Arbitration Assn. So last week the association named Abraham A. Desser (above), one of the nation's top men in labor relations work, a director of its Labor-Management Division.

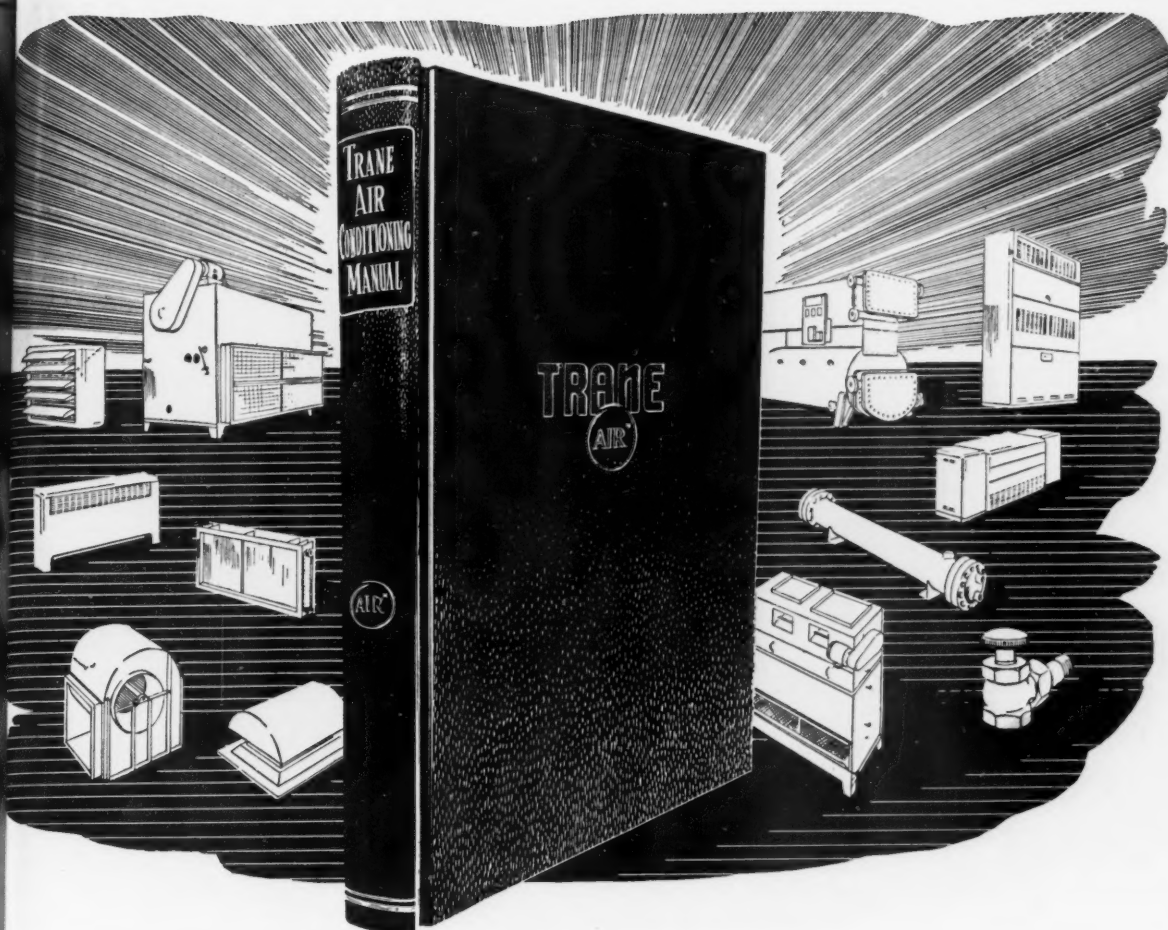
Desser goes to A.A.A. from the National Industrial Conference Board.

So the quick reaction was a demand for increased government power in national work stoppages. Unions want the power restricted to the right to undertake nationwide conciliation; on the other hand, there was growing public support to extend government activity into a broad field of labor relations.

• **"Taft Law"**—One such proposal, characterized by unions as "a Canadian Taft-Hartley act"—was deferred last July until 1948 by the Canadian Parliament. It would permit national conciliation restrict strikes, and create a Labor Relations Board to handle unfair-labor-practice charges.

This program, based on Canada's wartime labor code, would cover only some 250,000 workers in interprovincial industries, such as communications, transportation and shipping, and any other deemed by Parliament to be for the general good of all Canada. The remaining 4,000,000 Canadian workers would remain under provincial labor laws.

Canadian labor strongly opposed the measure at the last session of Parliament. Employer associations urged broader definition of interprovincial industry; now they're expected to cite meat strike to support their position.



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together for use together, and that reflect the high standards of Trane product engineering.

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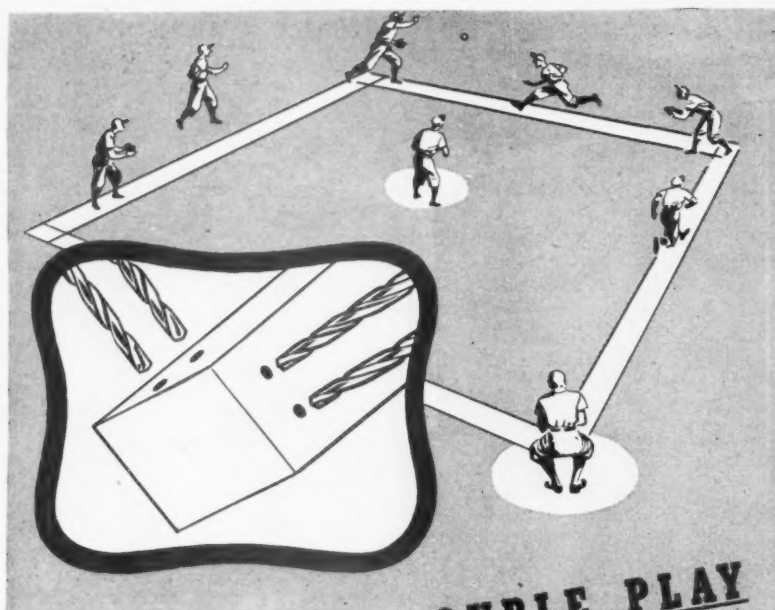
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The operation was a minor one, perhaps, in the making of a finished product. But profits are built from economies in minor operations.

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now being done by hand, which can be done faster, safer, and better by the application of Bellows "Controlled-Air" Powered Devices.

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Angle in Charity

In Chicago, unions share in administering community welfare plan. Activity affords chance to increase employee loyalty.

"Hey," the unions are saying now, "our members kick in a big chunk of the dough those Community Chest drives collect. How about giving us a place on the boards that decide what's going to be done with the money?"

This bid arises from labor's role in the giant National War Fund collection. Welfare groups sought union cooperation—which was given free. In turn, responsibilities were offered union representatives. These, the union accepted eagerly.

• **Aim: Strength**—Today, labor organizations see large advantages in going after a partnership with business interests in community welfare work. Once won, it's an easy point from which to guide a welfare program along lines which will strengthen unionism.

For example, a union shop steward urges an employee to take his eviction notice to a counsellor in the union hall rather than to the company personnel office. If this urging succeeds, he scores in the continuing contest between union and employer for employee loyalty. If he can get a hypochondriac worker a free X-ray, he scores again. The possibilities are almost endless.

Access to such services by union personnel gives the unions a chance to provide more service to the rank and file. And membership on Red Cross local boards, or something equivalent, is an easy way for a union—which is often thought of as an other-side-of-the-track outfit—to get some status in the community.

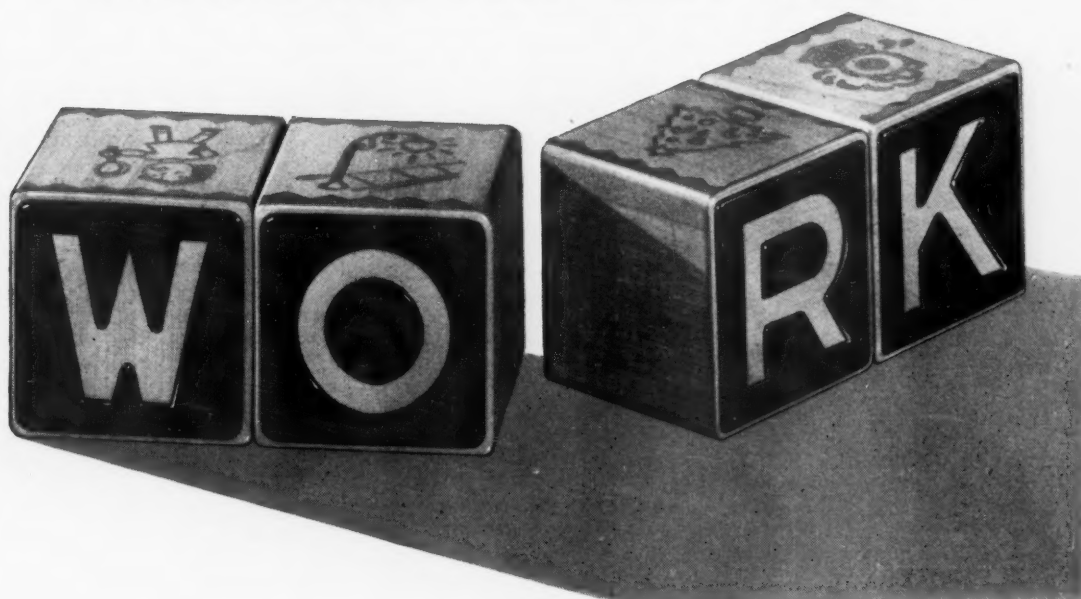
• **Chicago Project**—For an outstanding example of the way organized labor is sharing in community welfare work, unions look to what is being done in Chicago. Two years ago, the Chicago Council of Social Agencies launched a Social Work-Labor Project.

It is staffed by representatives of the Chicago Industrial Union Council (C.I.O.), the Chicago Federation of Labor Welfare Committee (A.F.L.), and the Railroad Brotherhoods. It is supported by an appropriation from the community fund of \$24,000 a year, on a three-year demonstration basis.

Purpose of the project is twofold: (1) to educate union workers on the welfare services available to them in time of need; (2) to get representatives of labor groups to lend an active hand in planning and operating health and welfare services.

Each of the three labor groups carries

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PICKETS FIGHT back-to-work movement at Detroit garage, struck by U.A.W.

Striking Garagemen Are Reinforced

A flareup of fighting last week drew attention to a significant, but little-noticed, strike of Detroit mechanics. Some 1,500 members of a mechanics local of C.I.O.'s United Auto Workers struck Aug. 19 to enforce contract demands. Dealer-operated garages were the target; 57 closed.

Last week, a month of strike solidarity was shaken. A back-to-work movement, which claimed a nucleus of 300 dissatisfied strikers, was met with massed pickets. A police riot squad and U.A.W. reinforcements

from auto plants pitched in. While some mechanics got through, the strike continued—quickly bolstered by financial and moral support from the U.A.W. international executive board.

The auto union's interest is clear. U.A.W. long has considered the nation's garages and service stations a ripe field for organizing. Recently U.A.W. membership has been lagging. Hence, the union created a new Garage Workers Council. To start it off on the right foot, it wants a Detroit garage strike victory.

on its own program to push these objectives.

• **How C.I.O. Does It**—C.I.O. union locals are reached through the community service committee of the Chicago Industrial Union Council. Secretary of the council committee, Mrs. Myrna S. Bordelon, is C.I.O. staff member of the Social Work-Labor Project.

Keystone of the C.I.O.'s program is a training course for C.I.O. counsellors in the local unions. In cooperation with the project, the C.I.O. has already offered 40 courses. Most of them teach counsellors to advise their members on where and how to get help on family welfare, health, legal, social security, and unemployment problems.

A general 6-week course covers all public and private community welfare services available in Chicago. In addition, the council project offers special courses on welfare facilities available for workers injured on the job, industrial health and safety, and problems of un-

employed workers. To assist locals strike, a special strike course trains union counsellors to help members with emergency financial, legal, eviction, medical care, and similar problems.

• **A.F.L. Version**—The A.F.L. project is similar in principle, but differs somewhat in details. The A.F.L. staff member on the project is C. C. Murphy, who reaches A.F.L. members in 760 Chicago and Cook County locals, he works through the welfare committee of Chicago Federation of Labor. Murphy is also secretary of the committee.

A.F.L. craft unions, unlike the C.I.O. locals, are rarely confined to a single plant. Thus the A.F.L. part of the project has relied more heavily on mass publicity program. The Federal News, weekly C. F. of L. publication and the Federation-owned radio station WCFL, carry news items and publicity material on health and welfare activities of Chicago's social agencies.

Meetings with local union officers



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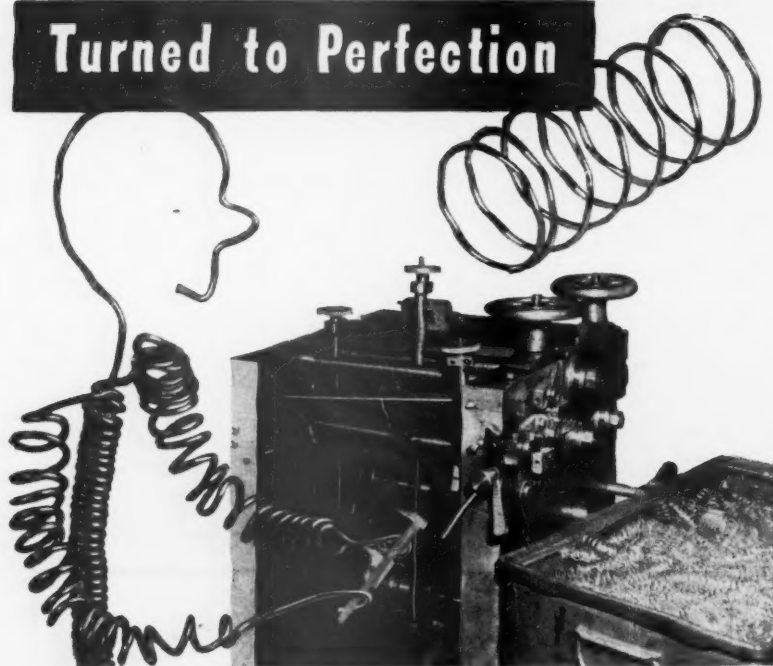
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shop stewards carry the program direct to local union members.

• **Railroaders**—The Railroad Brotherhoods, without a central organization, have a slightly different approach. The railroad labor staff members depend on direct personal contact with officers of the 415 local lodges in the Chicago area and on publicity about the program in union publications. Local lodges are encouraged to set up service and welfare centers for members needing help.

Through the project, the three labor groups have jointly backed such community welfare programs as the chest X-ray program of the Chicago Tuberculosis Institute, the smallpox vaccination program of the Chicago Health Dept., the United Home Finding Service campaign to find foster homes for dependent children.

• **Labor's View**—The unions are now working to bring the labor viewpoint into welfare agencies' planning and budgeting. The C.I.O. has 68 members serving on Council of Social Agencies and Community Fund Boards and committees. The A.F.L. has 51 representatives on the Railroad Brotherhoods 13. Recommendations for labor members of boards and committees are cleared through the Social Work-Labor project.

WHAT EMPLOYERS THINK

How well are employers living with their unions? What have been their experiences with restrictive labor practices? Those questions have been asked many times during the past 25 years, while industrial labor relations were under a congressional microscope. They're being asked again by subcommittees concerned with possible future changes in federal labor laws.

To get a sampling of what employers themselves think, McGraw-Hill sent questionnaires to managements of a diversified group of industrial plants.

Some findings, tabulated this week from 91 replies:

One-third of sampled employers say unions limit production.

One-fourth complain unions require more workers than needed on a job.

Half of those employing apprentices complain that the union restricts the number which can be employed.

One-fifth say their unions have resisted use of labor-saving devices.

Half of the sampled employers believe productivity is dropping, while one-third think it is moving up a little. Most blamed workers for any decline. Three-fifths of the employers aren't satisfied with efforts by their workers.

Two-thirds—60 of the employers—report "satisfactory" union relations in their plants. Of the others, nine consider plant relations unsatisfactory. 20 say the situation is improving, only two report conditions getting worse.



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U.A.W. BALLOTING at Ford Rouge plant climaxes intraunion fight on pension plan

Rebuff to Pensions—Why?

Ford workers choose straight raise, despite fact long benefits would have been larger under pension plan. One reason: Cash looks bigger than future security when prices are rising.

Defeat of the most publicized pension plan in American industry—at Ford—looked a sure thing late this week. Counting of ballots at River Rouge was still going on. But in other Ford plants, where votes already were tallied, the tide went 10 to 1 against the plan. (The margin at the Rouge, where three-fourths of Ford's employment is concentrated, is not expected to be so lopsided.)

Sidetracking of pensions in favor of a straight hourly raise plus holiday pay comes from complex reasons—political maneuverings in the United Auto Workers (C.I.O.), human emotions, grocery-store economics, psychology.

• **Meaning**—Result of the vote does not mean that labor will abandon pension drives, although the steam certainly has been taken out of them. The defeat means that employee social security, privately financed, stands just about where it did before the issue was drawn at Ford. On the other hand, adoption of the pension would have meant a certain drive toward the same objective in other companies. The wider effect of the Ford vote is thus negative rather than positive.

As for conclusions to be drawn from the voting at Ford, management men in Detroit see them like this:

(1) In times of rising prices, today's

dollars look better to workers than tomorrow's security.

(2) Only older workers have a real interest in pensions. Men of 30 and under look upon retirement at 65 as a security fund as something far off.

(3) In any case, workers are not interested in pensions for which they have to fork up more than in plans which are paid for entirely by others. Even general social security, some think, will have rough going if put to a vote.

(4) Pension programs, if they are to be "sold" harder than a straight raise, must be "sold" harder than a straight raise. • **Choice**—Ford workers (110,000 eligible, though the vote is unlimited beyond 70,000) had their choice of two proposals:

(1) A straight 11½¢ raise plus six unworked holidays. That would have equaled about 15¢ all told.

(2) The "Pension Plan," which would also have come to 15¢—but on its face. Only 7¢ of this would have gone directly into a pay increase; the other 8¢ would have gone into the pension fund. So far, so good. But there was one more ramification of the proposal—and it was the rock on which the pension idea foundered.

• **Troublesome 2%**—Each employee would have to kick in an additional 2% of his pay envelope to the pension fund. On average this would have come to

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The Norfolk and Western never waits for tomorrow. It acts today to prepare for the traffic of the future.

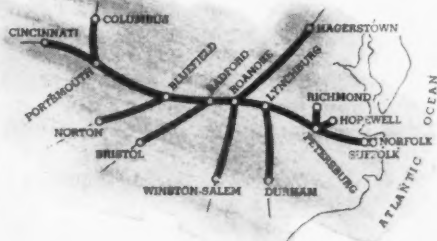
Today, the Norfolk and Western is spending many millions of dollars for better roadbeds, better merchandise freight piers, better general equipment, and better upkeep, so that throughout the tomorrows, the railroad will continue to provide *Precision Transportation*.

Under way is a \$12,000,000 track and tunnel improvement program on the main line . . . in another district, \$3,000,000 is being spent for Centralized Traffic Control facilities and track and grade improvements . . . new rolling stock costing several mil-

lions of dollars is on order . . . and at the Port of Norfolk \$6,000,000 is being spent on expansion of ocean terminal facilities, which include construction of one of the largest and most modern merchandise piers ever built, new warehouses and new supporting yards.

This activity is typical of the foresight that increases operating efficiency, improves safety and increases traffic capacity and speed . . . foresight that makes Norfolk and Western transportation *Precision Transportation*.

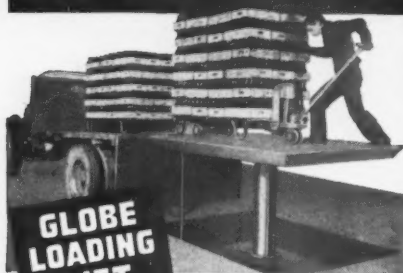
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Safeway Stores, Incorporated Preferred and Common Stock Dividends

Notice is hereby given that the Board of Directors of Safeway Stores, Incorporated, on September 4, 1947, declared quarterly dividends of 25c per share on the Company's \$5 Par Value Common Stock payable October 1, 1947, to holders of such stock of record at the close of business September 18, 1947, and \$1.25 per share on the Company's 5% Preferred Stock, payable October 1, 1947, to holders of such stock of record at the close of business September 18, 1947.

MILTON L. SELBY, Secretary.

September 4, 1947.

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STEEL AND WIRE CO., INC.
WORCESTER 7, MASS.

3¢ an hour; for some high-paid workers, considerably more. Thus it would have cut the net pay increase to less than 4¢ an hour; and to workers whose families are faced with \$1-a-pound butter the difference between 4¢ and 11½¢ adds up to a very concrete \$3 a week.

By voting in favor of taking this \$3, the workers chose to forego one big benefit in the pension plan: the fact that the company had promised to toss an ante into the pension pot big enough to make immediate disbursements possible. This had been estimated at another 7¢ an hour. So, in the long run, the workers have voted for a 15¢-an-hour raise in preference to one of 22¢.

Young men (average age at Ford is 44) obviously figured the pension plan took too much ready cash, whatever its long-term merit.

Further, the plan was complicated, and human beings are prone to take a known quantity over an unknown.

Psychologically, too, the background was badly set. The pension idea was announced prematurely because Ford workers got jittery at silence from their negotiations while other companies were granting pay raises. When actual facts of the plan were announced, they weren't quite as rosy as the workers' dreams. Reaction set in.

• **Union Politics**—Looming over the whole picture are the turbulent auto-union politics. The right-wing, led by Walter Reuther, is in the midst of a drive on a broad, general front to unseat left-wing opponents.

Reuther's chances are affected by the pension voting at Ford. Richard Leonard, of the anti-Reuther wing, is union vice-president and head of the Ford department. The Ford pension plan was his baby. Had it been ratified he would have been a hero of enough stature to loom as a rival for Reuther's presidency. Reuther is a determined and single-minded adversary. Seeing Leonard as a potential rival, his forces went down the line to whip Leonard's proposition.

The Reuther opposition was subtle rather than open. It emerged only on the point that the pension's cost ran too high—that workers needed security, but not at the price asked.

The anti-Communist Reutherites formed one-half of a so-called "unholy alliance" against the plan. The other half were the Communists themselves. The Communists, who really control the 70,000-man Local 600 at River Rouge, plunked openly against the plan at first. Later on, they moved more cautiously but just as positively.

• **Quick Switch**—The Communists had campaigned for pensions for years; they started the Ford deal to begin with. Then, having won their point, they reversed themselves. Why the switch? Simply because stabilized employment

F.A.A. CHIEF QUILTS

Robert H. Keys retired week end as president of the tiring Foreman's Assn. of America. His reason: He needs full time for campaigning for Detroit city council seat.

Even F.A.A. members were skeptical. Dissatisfaction of Keys' leadership has been since recent, unsuccessful strike. A move to unseat him had strong advocates on the eve of last week's F.A.A. convention in Detroit. Vitalized leadership was urged battles just ahead.

Keys' retirement averted a showdown. Significantly, C. Brown, a top Keys aide and candidate for a successor, elected to the post.

and worker security are the great enemies imaginable to Communist of disturbance and confusion in any try trade unionism.

The Communists cried for a pension plan because the idea sounded good and also because it seemed impossible. When it really came through, they had no choice but to turn it down.

• **Company in Favor**—What with open Communist opposition and less apparent Reutherite standstill, chances for the Ford pension became progressively thinner. The company itself wanted to see the plan installed even though it would have cost more than the straight pay rise. One reason: The plan would have hastened retirement of over-age and inefficient workers.

But Ford could not campaign for the plan because, it believed, workers would be apt to distrust automatic any plan that the management favored openly.

• **At G.M.?—U.A.W.** has already won General Motors for a pension. The demand was filed by the same Reuther who opposed the Ford deal. That it was on three grounds: (1) to cover contingency that Ford workers might not approve the idea; (2) to start a program which the auto union's right-wing is less expensive for the workers; (3) to give Reuther the opportunity to lead the parade.

The pension idea will come up next year—with a bang. It's a safe bet General Motors will retort that workers don't want pensions, as evidenced by Ford. And—more important in Reuther's position—G.M. will say that pension funds are a function of the industry as a whole when they affect as many people as G.M. employs. Not G.M. nor Chrysler, the other big auto-maker in autos, will grant a pension as readily as Ford.

INTERNATIONAL OUTLOOK

NESS WEEK

BER 27, 1947



U. S. world leadership is in for a real test during the next six months. If we don't win this round of the "cold war" with Russia, the danger of a shooting war will hang over our future.

Washington is concentrating maneuvers on two fronts:

- (1) Making the United Nations an effective trouble-shooter.
- (2) Bolstering up Western Europe so it won't fall in Russia's lap.

At U. N., Secretary Marshall has launched a campaign to check Russian misuse of the veto in the Security Council.

He isn't aiming for abolition of the veto power—just for curbing its use. He proposes, for instance, to give investigations of trouble-spots like Greece to Assembly committees. (Now they are in the hands of the Security Council where tempers are quick and vetoes frequent.)

Marshall will probably get most of what he wants from U. N. and Russia will hardly choose to withdraw from U. N. on this issue.

But Soviet Vice-Foreign Minister Vishinsky's blast at the U. S. as a war-monger can't be dismissed lightly.

It won't make any more enemies for Moscow in the democracies. And, as a propaganda weapon, it will pay off within Russia and in Europe.

Vishinsky has provided the Communists in Italy and France with new ammunition.

In both countries the Commies have given up the idea of getting back into the governments legally, pulling the strings from inside. They're now on the warpath. Their aim is to grab power.

In Italy the method is to talk tough and foment strikes in agriculture and industry.

Communist policy in France is a step behind. But an ideological shift already has been made. In the future, "Stalinism"—not Marxism—is the party doctrine. Americans and de Gaullists are the enemies.

This is part of the Kremlin's counteroffensive against the U. S., the Marshall plan in particular. All the angles will be worked to the same end.

Stalin is now planning to end bread rationing in Russia.

The announcement may be timed for the November celebrations of the 30th anniversary of the Revolution.

The Moscow propaganda machine won't let workers in Britain, France, and Italy forget that they're still eating rationed bread.

This is where the Marshall plan comes in.

The Paris conference has now tossed its answer to Marshall's bid right back in Washington's lap (page 105).

The deficit of the 16 nations, plus Western Germany, for the next four years is figured at \$22.4-billion. If you add the \$3-billion requested for currency stabilization, the total needed from the Western Hemisphere is \$25.4-billion.

Needs from the U. S. itself are estimated at \$15.8-billion.

Capital goods worth \$3-billion can be cut off the U. S. total; the World Bank is slated to handle these. But funds for currency stabilization can

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
SEPTEMBER 27, 1947

come only from the U. S. So you can add the \$3-billion on again and figure the bill presented to Washington at about \$16-billion. Some \$6-billion is asked for the first year (1948) from this country.

The U. S. is faced with major policy decisions on the Far East, too.

The Wedemeyer report was on President Truman's desk when he got back from Rio.

As expected (BW—Sep. 6 '47, p99), Wedemeyer is recommending for China:

- (1) Help for the Nanking government provided military efficiency improves and distribution of land is pushed.
- (2) Putting future aid on a project-by-project basis rather than handing over a lump sum.
- (3) Nudging the government to get into line with popular wishes.
- (4) Boosting coal output as the base for industrial expansion.
- (5) Restating the need for financial reform and curbs on inflation.

Washington is appointing a new military governor to run our zone in Korea: Maj. Gen. William Dean. He's now assistant commandant of the Command & General Staff School at Fort Leavenworth.

Backed by Wedemeyer's report, the State Dept. hopes to get \$500-million for a four-year rehabilitation program in Korea.

It would be used chiefly to patch up the transport system, put new life into the textile industry, pep up production of building materials.

Despite denials, there's a good chance that Ottawa will devalue the Canadian dollar. It would go back to the wartime 90¢, possibly even a little lower.

There's only one other real out to Canada's dollar crisis (page 78)—a drastic damper on imports from the U. S. Washington is fighting this tooth and nail—it would be one more blow to the State Dept.'s program for freeing trade.

A U. S. loan, public or private, wouldn't solve the problem. It would just put off the day of reckoning.

Canada needs to sell more in the American market, buy less here. Devaluation could turn both tricks.

Two other moves would help push Canadian goods into the U. S.:

- (1) If Ottawa lifted its export ban on foodstuffs.
- (2) If Washington cuts tariffs on Canadian goods.

Lack of dollars is forcing the Peron government to think twice about modernizing Argentine railways (page 108).

Heavy orders have been placed in the U. S. for locomotives, passenger cars, freight cars. Where work on orders has started, Argentina will take delivery.

But contracts from now on will probably go largely to Britain. And the British have what they think is a hot sales slant.

A British mission is now in Buenos Aires and it includes British electrical engineers. The report is that they have a plan for electrifying the railway system. If they put the idea across, Peron might forget about the U. S., go along with the British. It's easier for him to pay pounds than dollars.

BUSINESS ABROAD

Europe Girds for Self-Help

Less-publicized portion of report by Marshall plan nations
up four-year recovery program. Specific goals established for
coal, coke, agriculture, transport, electricity, oil.

RIS—The hundreds of experts who
ed out a hot Paris summer on the
all plan have finally produced
report. These men have literally
the future of their countries on
work. Now they anxiously await
response from Washington to this

tions—The Paris planners have
up a four-year recovery program
the 16 participating nations and
Germany. This program is de-
to provide the answers to two
questions raised by Secretary Mar-
June 5:

What can Europe do to boost its
production through self-help and
cooperation?

After doing all it can for itself,
aid will Europe still need from the
Hemisphere?

Answers—The dollar figures that give
answer to Question 2 will steal the
show in the U.S. The totals are
big enough—a four-year deficit of
\$15.8-billion of this
needed to come from U.S. alone
(103).

viewed from this side of the
Atlantic, the most striking thing in the
report is the production program
Marshall plan nations have set
themselves. This will mean nothing, of
course, without help from the United
States. But, likewise, billions of U. S.
dollars won't mean much unless this
self-help scheme is as good as the plan-
Europe it is.

Four-year production goals have been
set for key industries: steel, coal, coke,
agriculture, transport, electricity, and
the objective is to restore agricul-
ture production to the prewar level;
mining and manufacturing output
to 1938.

Steel production this year will total
40.3-million metric tons. This com-
pares with 45.5-million tons in 1938.
Output, held down chiefly by
shortage of coke, is 25% below needs;
plan is to increase production next
year even more than this percentage,
to 43-million tons. Then, by consid-
erable modernization of existing capac-
ity, it is hoped to boost output by 1951
to 44-million tons.

Coal output (including lignite) fell to
30-million tons in 1945, but had re-

covered by this year to 440-million tons
(1938 production was 550-million). Per-
centage-wise, the greatest increase has
come so far from France (102% of pre-
war) and Belgium (88% of prewar).
But in reaching the 1951 target of 584-
million tons, reliance is being put on
the big coal producers—Britain and
Germany.

The British target for 1951 is 250-
million tons, the German 121-million.
Britain is supposed to export 8-million
tons to the Continent next year, 29-
million in 1951. The German export
goals for 1948 and 1949 are set at 19-
million and 23-million tons.

Coke presented a special problem.
Next year's deficit looked big, with pro-
duction at 53-million tons and needs at
66-million tons. This threatened fail-
ure in meeting the goal for steel. So a
subcommittee on coke worked out a
program by which this deficit might be

overcome. It included improving blast
furnace charging, diverting coke from
domestic and other uses, importing
coking coal.

Agricultural aim is to achieve by
1951 somewhat above prewar output of
all major foods except meats. (Meats
would only come back to 90% because
of their longer production cycle.) This
compares with the present agricultural
level of 70%-75% of production before
the war.

These goals won't be reached with-
out more fertilizer and a speed-up of
mechanization on Europe's farms. The
bulk of both fertilizer and equipment
is expected to come from the countries
themselves. Fertilizer output is to be
doubled by 1951; production of tractors
more than doubled. This will mean
self-sufficiency by 1951; major imports
of these items will be needed only in
the first two years.

Vast imports of foods will still be
needed, of course. Western Europe has
never been self-sufficient in food, espe-
cially not in grains. These food imports
will form the largest part of the trade
deficit. Their exact size will obviously
depend on European harvests—which
cannot be forecast.

Inland transport in 1945 was less than
half of 1938. But it has already come
back a long way toward normal. Rail-
road traffic next year will probably be
up to prewar levels; it will take until
1950 for waterways traffic to reach the



CONGRESSIONAL FACTFINDERS (left to right) Reps. Wolverton, Keogh, and Macy
get first-hand food data in Paris. (The fourth man's an Embassy press attache.) As members
of 19-man Herter committee now collecting relief facts and figures in Europe (BW—Aug.23
'47,p6), they undoubtedly will influence congressional action on the Marshall plan.

same point. For 1951, the target for all inland transport is 20% above that of 1938.

To reach this goal a tremendous amount of new equipment must be acquired. European industry is slated to supply 7-million tons of rails, 10,000 locomotives, 4,000 tugs and self-propelled barges, 620,000 freight cars, and 75-million railroad ties. But this still leaves 100,000 freight cars and 50-million ties to be acquired overseas.

Electric-power capacity in all of Western Europe is scheduled to rise from 43-million kw. in 1947 to 65-million kw. in 1951. A considerable part of this increase consists of new hydro-power developments in France and Italy. The electricity committee also projected a great international program to develop the hydro resources of the Alps.

Oil imports in 1951 are to be raised 50% to 60% above the 1947 level of 320-million barrels. About half would continue to come from the dollar area. But the Europeans will make an effort to save foreign exchange by refining more oil themselves. This is expected to reduce the percentage of refined imports from 75% this year to 58% in 1951.

• **Basic Problem**—Underlying all these production goals is the problem of manpower. Most of the 16 countries already have a labor shortage. If the program is to succeed, the shortage nations will need nearly 700,000 more workers, mostly skilled ones. A few countries, notably France, Switzerland, and Belgium, have already increased hours, employed more female labor, or directed labor to essential occupations. Britain is now following suit.

But the crux is to tap the great pool of 2-million workers available in Italy and 520,000 workers in DP camps. To speed current lagging efforts for accomplishing this, a new 16-nation manpower conference will be held in Rome next January.

• **Intangibles**—Beyond the four-year production goals, the conferees pride themselves on several less specific achievements:

- The governments have pledged themselves to work toward internal financial equilibrium and toward the freer-trade principles of the International Trade Charter.

- They have tackled the problem of a customs union.

- Finally, they've set up the basis for future governmental cooperation. It lies in the continuing organization that the 16 nations have pledged themselves to set up if American aid is granted. Purpose of this organization is to check on progress toward the production, trade, and financial goals. It will report to the U. S., and act to break any international bottlenecks which slow the recovery program.



Frank T. Ryan

John Pepper

Edward R. Stettinius

Beating World Dollar Shortage

World Commerce Corp., set up by U. S., British, Canadian financiers, aims to cut through exchange troubles. It will arrange trades, export U. S. equipment, know-how.

Formation of an international corporation with a special angle on how to beat the world dollar crisis was announced in New York this week.

Its name—World Commerce Corp.—is appropriate. A group of leading U. S., British, and Canadian financial interests organized the outfit. And they set it up to do a worldwide business.

• **Setup**—The company is a successor to the British American Canadian Corp. (formed in September, 1945). It is already represented in 47 countries and has partially owned subsidiaries in Canada, Brazil, Mexico, Egypt, Panama, and the Philippines.

W.C.C. is running a four-way operation. Its activities are those of an (1) international banking house, (2) dealer in international commodities, (3) distributor of American goods abroad and foreign goods in the U. S., and (4) exporter of American industrial know-how.

• **Barter Deals**—The unique thing about W.C.C. is the method it uses to cut through foreign exchange difficulties. It sets out to create the exchange for three- and four-way trade deals.

Its idea is to build "bridges" between countries whose trade is blocked by exchange restrictions, thus beating the dollar shortage which is already choking off U. S. exports handled through normal trade channels.

• **Payment in Goods**—For instance:

Until recently a British manufacturer was paying dollars to get essential raw materials from Sweden. Now the British government has cut off his dollars. This would have cut off his production if

W.C.C. hadn't stepped in to provide the dollars to pay for the Swedish materials. In return for its contribution to the deal, W.C.C. takes payment in British goods.

Similar transactions are handled with manufacturers in France, Czechoslovakia, and other continental countries. The firm sees an opportunity in many, and plans to move in there.

• **Exports, Too**—W.C.C. gives its own twist in exporting know-how for industrial development projects abroad. A typical example is a \$3-million, 1,800-bbl.-a-day cement plant which the firm is engineering at Port Henderson, Jamaica.

Most of the capital for this project is coming from London (in sterling). A small part will be raised in Canada. Part of the machinery, equipment, and supplies for the plant is being bought in Canada, the remainder in the U. S. In return for its engineering know-how, W.C.C. will get an equity in the Jamaican venture—the Caribbean Cement Ltd.

• **Exclusive Franchise**—The Jamaican government has granted the company an eight-year exclusive franchise for manufacture and sale of cement on the island.

W.C.C. has cement plants in Ecuador and South Africa. It is blueprinting an integrated cement industry for Egypt. It may give a franchise to the De Valera government's electrification scheme for Eire (W.C.C. would provide U. S. and Canadian power equipment, take payment in sterling). Before long it plans to



Andrew Carnegie and his associates watching a "Jones Mixer" at his Braddock Plant, about 1875. Painted for USIP by Benton Clark.

His first job paid \$1.20 a week

...ted work at fourteen as a cot-
...ill hand, working long hours
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...enty-three he had invested in
...en different enterprises, and
...in the road to financial inde-
...nce. Ten years later, he had
...the foundation for America's
...steel industry. Andrew Car-
...never flinched at hard work,
...made it pay . . . pay good
...to millions of his fellowmen,
...duce a torrent of steel for the
...of his country and the world.
...tunity, grasped by eager
...has made this a land of
...Imagination, hard work,
...management: these have been

the keys to abundance. Sound man-
agement has made possible the
greatest production and distribution
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of abundance for all depends upon
a simple understanding of the con-
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into the automotive field abroad, building assembly plants in several spots.

• **Self-Liquidating**—Matched against its ambitious aims, W.C.C.'s capital looks small—only \$1-million paid in (65% of this is American). But the firm expects most of its projects to be self-liquidating. And its American sponsors—Atlas Corp.; Glore, Forgan & Co.; Ladenburg, Thalmann & Co.; the Mellon interests; John J. Ryan & Sons, Inc.; and Transamerica Corp.—are in a position to supply any additional dollars that may be needed as operations expand.

London financial backing comes from Robert Benson & Co. and Hamilton Bank. Canadian interests include J. Gundy, E. W. Bickle, and James Murdock.

• **Officers**—President of the corporation is Frank T. Ryan, vice-president of New York textile export firm and a partner in Bache & Co. Executive vice-president and a key figure in W.C.C. during its formative stages is John Pepper, president of Biddle-Sawyer Corp., an international firm dealing in bulk chemicals and drugs in which W.C.C.

BUENOS AIRES LETTER

BUENOS AIRES—The new U. S. Ambassador to Argentina, James C. Bruce, hit the nail on the head for American businessmen when he called to present his credentials to Argentine President Juan D. Peron.

Peron is said to have asked what Argentina could do to attract more American capital in support of the Argentine five-year plan. Bruce replied, pointedly: "By giving more consideration to the North American capital you already have here."

What the Ambassador meant is this: U. S. businessmen now operating in B. A., many of them longtime residents of the Argentine, are hamstrung with red tape and financial restrictions that are on the verge of putting them out of business. For example, U. S. banks here must operate as virtual branches of Argentina's all-powerful Banco Central.

Peron, however, has taken one step in the right direction. In the case of new foreign investments in the Argentine, a certificate of origin issued by the Banco Central may permit the investor to take his money out of the country whenever he wants to. This provision applies only to new short-term investments for less than six years—not to capital already here. The new foreign investor will also be guaranteed the privilege of remitting to the U. S. a profit equal to no more than 5% for the first year—with allowable remittances gradually increasing up to 12% for the sixth year.

THE PICTURE for U. S. trade is less favorable. Argentina is running so short of dollars that it may cancel the undelivered portion of an order for 7,000 U. S. tractors. And informed observers here warn U. S. businessmen: Expect further cancellations.

While Argentina has been buying 40% of its imports from the U. S. it has been selling only 10% of its exports to the States. The balance has been made up by converting pounds to dollars. With Britain's suspension of sterling convertibility, however, the Argentine was caught in a squeeze.

Miguel Miranda, Argentina's economic dictator, promptly banned all imports. Shortly afterward, a limited number of imports were permitted; but the ban still applied to all luxury goods including automobiles, radios, batteries, textiles, and many forms of machinery—chief goods purchased from the U. S.

THIS WEEK, the Miranda-dominated Banco Central extended the list of permissible imports to include: products for public health services; essential raw materials for basic production and national defense; materials for the building and export industries; and transport equipment. On paper, it began to look good for U. S. exporters.

But two jokers were quick to emerge:

(1) More red tape. The Banco Central itself will decide what goods come under the newly approved headings; and in order to do so, must approve all import licenses individually.

(2) Geographical discrimination. All foreign countries are divided into two zones: (a) neighboring republics together with the French franc bloc; and (b) all the rest of the world. Goods must be purchased in the first zone if possible. It now appears that Britain may be added to the first zone; this would give British exporters a decided preference over Americans in the potentially huge Argentine market.

controlling interest. Other big members of the board include R. Stettinius, Jr., Maj. Gen. J. Donovan, and Sir William Benson, British-Canadian financier.

Eased for More Buyers in Germany

Businessmen interested in buying man-made goods are now being admitted to the combined U. S. and British zones under an expanded program. Merchandise available for export includes chinaware, cameras, toys, radio sets, jewelry, clocks and watches, and liquors. Further information regarding buying opportunities in occupied Germany can be obtained at any of the 50-odd field offices of the Dept. of Commerce.

Expensive—Because Germany is still a devastated country and occupation forces must be relied on for food, shelter, and most transportation, the quota for commercial goods is limited to 130 a month. Charges for services supplied by military authorities are moderate, averaging around \$2 per day for lodging and a meal. Common carrier transportation is available between the big cities and is cheap. Private transportation in all main business centers can be obtained from the military at a cost of \$20 a day.

A businessman who wants to make a trip must apply for a passport in regular way.

With his passport application, the businessman should submit a letter in German from each firm he will represent setting forth the reason for his trip, a detailed itinerary in Germany, the length of stay in each place, type of business the firm is engaged in, and any connections and dealings that the applicant and each firm he represents have in Germany.

Application—The State Dept. then forwards his application to the War Dept. If military permission is granted, a passport is issued.

Over 500 businessmen have been admitted to Germany to explore buying possibilities and to close contracts. The list issued by the War Dept. includes those that permits were issued to the business representatives to the combined zones between May 15 and 20:

Well Miller and John Odlin Naus—the Sheffield Assn., Los Angeles.

Smith Martin Theile, Theile Tanning and Charles H. Stehling Co., Milwaukee.

Rudolph Schwengel, Joseph E. Cramer, Cramer's Jewelry Co., Washington, D. C.

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THE MARKETS

(FINANCE SECTION—PAGE 2)

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	145.6	147.2	148.6	142.5
Railroad	41.1	41.8	42.2	45.8
Utility	74.0	74.2	75.4	73.9
Bonds				
Industrial	121.9	122.0	123.8	122.3
Railroad	109.0	109.2	109.8	112.2
Utility	114.0	114.0	114.2	113.5

Data: Standard & Poor's Corp.

Lost: One Bull Market

Wall Street's most enthusiastic optimists say that ever since mid-May we have been seeing the start of a new bull market. And it's a move, they believe, that's destined to be more sensational, and profitable, than the 1942-46 price upswing.

• **Doubts**—It's quite possible, of course, these predictions may prove true in the months ahead. But the recent movement of stocks in general doesn't look much like a bull market. And such doubts are strengthened by a review of the market's course since the May-July rally, which inspired the "new bull market's dreams.

That's not to say that recent months haven't had any "promising" rallies. Several of these have put in brief appearances, raised bullish hopes. But they have all proved abortive and short-lived.

• **For Instance**—Take as an example last week's sharp rally. This started abruptly in the last hour of Tuesday's New York Stock Exchange trading session. Prices,

moreover, rallied even more sharply next day—under the impact of big buy-orders to produce the big first million-share day since late June.

Thursday and Friday, however, no continuation of the buying came. Nor was it in evidence when trading was resumed on Monday of next week. All signs indicated, instead, that traders who had made paper profits the rise had decided to waste no cashing them in.

This Tuesday proved even more disappointing to the Street's bulls. In the exact opposite of last Tuesday's Brokerage houses were suddenly flooded with sell-orders soon after the final trading had started. In that alone almost 50% of the day's \$80 share trading total was chalked up to prices of many of last week's rallies plunging \$1 to \$3 lower before closing gong sounded.

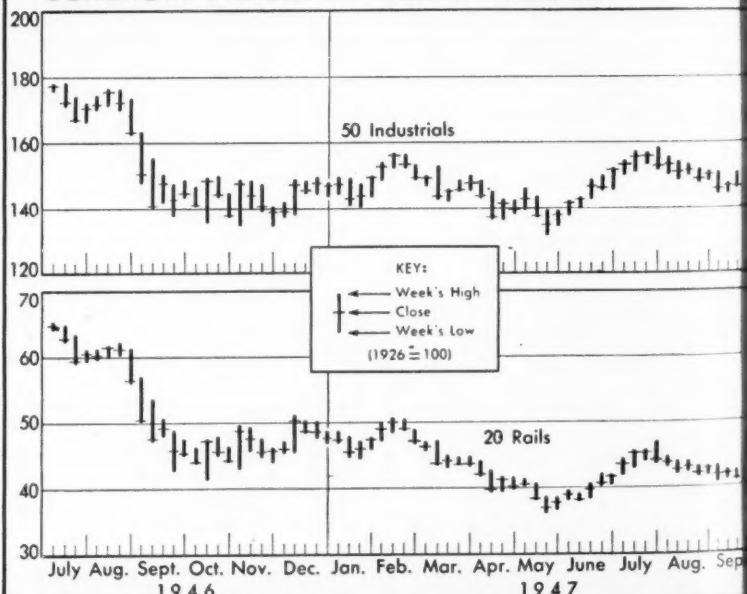
• **Explanation**—For this selling spree, as usual, had an explanation. It was touched off, they said, by news that Arabian oil concessions might be canceled as a protest against any partitioning of Palestine.

It's quite true that the oils were first to weaken, and that they led the decline. But sharp losses were shown by the steel and motor stocks as well as in most other sections of the market. So it wasn't entirely an "oil market" by any means.

Here's what seems to be a more complete explanation:

Uncertainties over the general foreign situation.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

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Prices of Recent New Issues Decline

Amount Sold (in Millions)	New Issue	Offered at		Recent Market	
		Price	Yield	Bid	Yield
\$200	Amer. Tel. & Tel. deb. 2½s, 1987.....	102.87	2.76%	101.37	2.82%
11	Arkansas P. & L. mtg. 2½s, 1977.....	101.80	2.79	99.13	2.90
60	Consol. Edison (N.Y.) mtg. 2½s, 1972..	102.00	2.64	101.63	2.67
15	Cudahy Packing mtg. 2½s, 1967.....	99.50	2.66	97.63	2.75
60	Detroit Edison mtg. 2½s, 1982.....	101.13	2.70	100.13	2.74
10	Florida P. & L. mtg. 3s, 1977.....	102.60	2.87	101.50	2.92
22	Iowa-Illinois G. & E. mtg. 2½s, 1977....	101.40	2.68	101.00	2.70
24	Kentucky Utilities mtg. 3s, 1977.....	101.98	2.90	100.50	2.97
15	Libby, McNeil & Libby deb. 2½s, 1967...	100.50	2.84	100.37	2.85
10	Lerner Stores deb. 3s, 1967.....	100.00	3.00	100.00	3.00
15	May Dept. Stores deb. 2½s, 1972.....	101.00	2.57	99.00	2.66
15	National Supply deb. 2½s, 1967.....	100.75	2.70	99.75	2.76
125	New York Tel. mtg. 2½s, 1982.....	101.00	2.62	101.25	2.70
29	Pacific P. & L. mtg. 3½s, 1977.....	102.91	3.10	99.75	3.26
40	Pub. Service of Col. mtg. 2½s, 1977....	103.25	2.72	103.00	2.73
75	Southern Bell Tel. & Tel. deb. 2½s, 1987..	102.80	2.76	102.00	2.80
12	Southern Cal. Gas mtg. 2½s, 1977.....	104.21	2.67	102.50	2.76
40	Tenn. Gas Transmission mtg. 3s, 1967....	102.25	2.85	102.00	2.86
32	Toledo Edison mtg. 2½s, 1977.....	103.16	2.72	102.50	2.75
20	Wheeling Steel mtg. 3½s, 1967.....	101.75	3.13	100.00	3.25

book were increased by this week's attacks on America's foreign policy by Soviet spokesmen at the United Nations meeting. And fears rose that inflationary pressures in commodity prices may be sharply on the domestic business nation.

New-Issues Market Uneasy

Wall Street's new-issues market is in the midst of the early-fall uptrend in corporate financing operations that was reflected (BW—Sep. 13 '47, p. 119). September has been the busiest month for underwriters for a long time.

Quick Profits—But recent weeks haven't been all peaches and cream for new-issue houses. There have been quick-profit deals involving easy-to-securities. And underwriters who are out the highest "safe" price that can be paid for a new issue have more often found themselves "on a spot."

The cause of the pricing trouble lies in the gradually widening spread between the yields of corporate and government bonds. The spread has deepened in the last year.

Not so long ago AAA corporates could be sold at prices offering returns only ¼ of 1% (25 basis points) above the yield available in long-term government bonds. Early in 1946 (BW—Feb. 16 '46), soon after the Victory Loan 2½s were sold at par, a Union Pacific issue was sold on a 2.47% yield basis. A small utility issue offering a return of only 2.39% was sold.

Institutions Shy Away—Those days, however, have passed. Large institutional purchasers of corporate issues, in particular, have demanded a greater return on their investment. Such buyers, the backbone of the new issues market,

can't be lured into buying new offerings unless they think the price asked offers them a reasonable return.

Various corporate bond-yield averages have shown the effects of this buyers' strike for better returns. Victory Loan 2½s have lately been holding unchanged around 2.30%; but gilt edge corporates, measured by Moody's AAA yield index, are now yielding around 2.62% against 2.57% shortly after Labor Day. AA corporate issues are yielding 2.70% vs. 2.65%; and A-rated bonds 2.87% vs. 2.81%. More speculative bonds, such as the BAA-rated group, are now yielding 3.26%, compared with 3.18%.

Gap Widens—In recent weeks underwriters have reflected this trend by widening the gap between corporate and government bond yields. An A-rated utility offering, for example, was recently offered at some 60 basis points higher than the yield on governments. This proved sufficient to attract buying.

But underwriters weren't so successful in their pricing of the AA-rated Detroit Edison bonds that were put on the market at about the same time. That \$90-million issue, offered at only a 40-point spread from governments—or to yield 2.70%—looked at first as though it might be an out-the-window affair; about 90% of the bonds were sold the first day. But the remainder were ignored; most were still on the shelf when the buying syndicate dissolved a few days later. And, since they were dumped to find their own market level, they have been available on a 2.75% basis.

Reaction—Most of the issues successfully distributed in the last few months have reacted to all this. Most in this group are available now at fair to sizable discounts from their original offering prices (box).



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THE TREND

BREAK-EVEN POINTS RISE DANGEROUSLY

In spite of high profits, few businessmen rest easily these days. One major reason is that most of them have watched the break-even point of their business—the point at which production begins to show a profit—climb steadily. That's a clear signal that profits will shrink fast if sales fall off.

To see just how great the increase in break-even points has been since prewar days, we asked a carefully selected group of manufacturing corporations to tell us what their experience shows.

• **Nine out of ten** of those who replied said that their break-even point (which was defined as the percent of capacity at which income just balances expenses) is higher now than in prewar days. Even more significant is the fact that only 38% of the companies would break even or show a profit today if their operations dropped to 60% of capacity. Back in 1939, 58% of them had a break-even point of 60% or under.

Moreover, many companies have grown substantially since prewar days. In some cases, sales volume has more than tripled. Therefore, in terms of the actual volume of goods and services manufacturers must sell to meet expenses, the break-even point has increased far more since 1939 than the percentage of capacity production required to make a profit would indicate.

• **The biggest reason** why break-even points have risen is, of course, the fact that labor costs have far outstripped price increases. Thus average hourly earnings in manufacturing are nearly double what they were in 1939 whereas manufactured goods prices are up 65%. Nevertheless, corporate profits after taxes have more than tripled since 1939 because the volume of business has increased more than enough to offset the rise in break-even points. U. S. business as a whole is operating at close to capacity right now so fixed overhead costs can be spread over a greater number of units than in 1939. That makes possible a great enough saving to permit industry to pay double 1939 wages and still make triple the 1939 profits.

But, because break-even points have risen, industry can continue to pay high wages and make high profits only so long as volume stays high. A decline in volume would automatically eat into the saving in overhead and, unless ways could be found to cut costs, business would very soon reach the point of vanishing profits.

Indeed, most companies would see their profits vanish long before output declined to the break-even point as now calculated. If their prices were to drop—a likely prelude to reduced output—their break-even point would

automatically rise unless the falling prices were accompanied by equally reduced costs.

• **Some reduction in costs** would, no doubt, be made to offset lower prices. But it is undoubtedly true that costs are more rigid now than ever before. Union wage rates constitute a major element of inflexibility. Other elements in cost which are not likely to decline much include sales drop include paid vacations, pension plans, bookkeeping for social security and withholding taxes, and the administrative costs of labor relations.

For instance, one company replying to our questionnaire listed in some detail the increase in fixed charges since prewar days. These include: a one-third increase in local property taxes; a 50% increase in state taxes; substantial increases in employee benefits; an increase several times in the size of its industrial relations, employment and public relations departments and the approximate doubling of maintenance wage rates and cost of equipment.

All in all, there are good grounds for the fear expressed by many of the businessmen answering the questionnaire that costs will keep up better than prices when business falls off. In that event a relatively small initial drop in business

activity might snowball into a major slump. With production disappearing, business spending for new plant and equipment would be chopped off. This would cut demand down the line and might well set in motion a general economic tailspin.

What to do to make the business structure more flexible is, of course, bothering many businessmen intensely right now. The best way out for everyone concerned is to cut costs by stepping up efficiency. Many, if not most businessmen, are well aware of the necessity of doing this. The \$20-billion that business is investing in new plant and equipment this year is testimony that a great deal has been done.

• **All too often in the past**, however, the real drive to step up efficiency has been postponed until the decline in sales was well under way. By that time it usually has been too late to do more than hold losses to a minimum.

By starting now on the most difficult of all management tasks—that of promoting the greatest possible efficiency—businessmen can do both themselves and everyone else a good turn. By pushing down their own break-even points they will be far better equipped to weather any economic storms that may lie ahead. And their stability in rough weather will go a long way toward keeping the whole economic machine going on an even keel.

HOW BREAK-EVEN POINTS HAVE RISEN

Break-Even Point*	% of Manufacturers in Each Group	
	In 1939	In 1947
Less than 40%	13	0
40-59%	45	38
60-79%	35	47
80-99%	7	15

* Percent of capacity at which income and expenses just balance.

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